



Module 7:

device administrator functions



the administrator menu

The Administrator menu allows an authorized staff to perform certain actions, once an Administrator passcode (set in Verity Build) has been entered. Functions available in the device Administrator menu vary by the type of device and its current state:

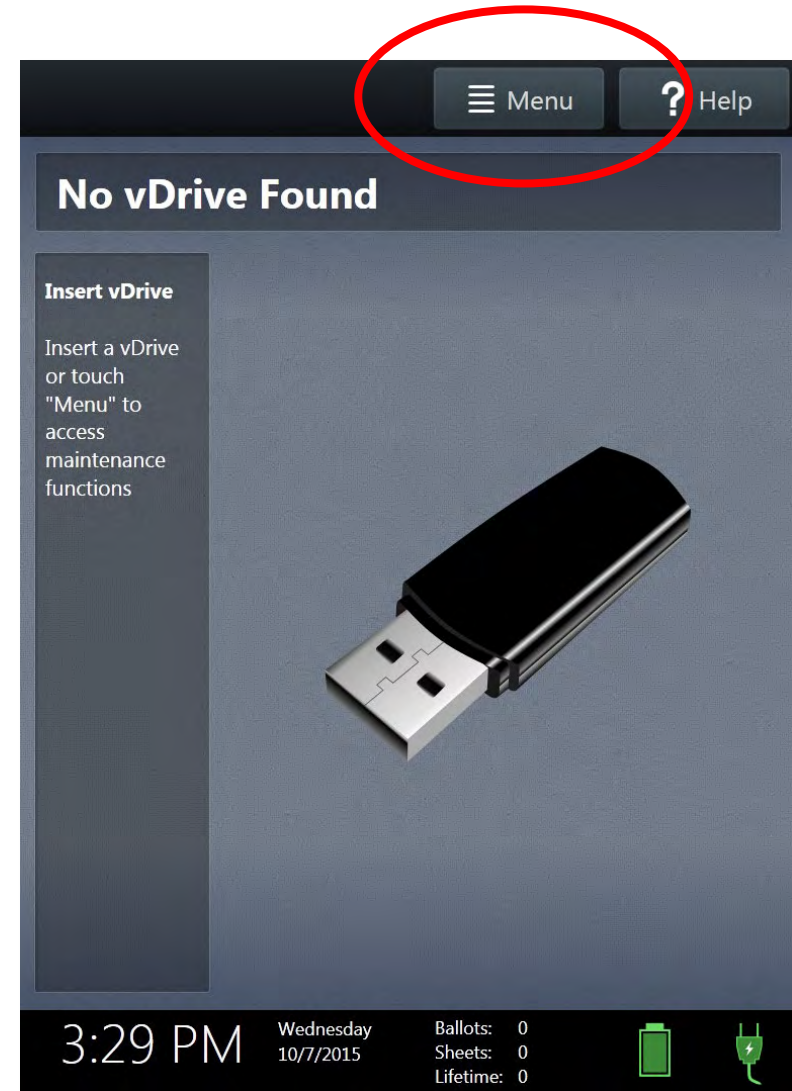
- Create recovery vDrive (*all devices*)
- Enable/disable recount mode (*Verity Scan only*)
- Change scanning rules (*Verity Scan only*)
- Change print settings (*Verity Touch Writer and Verity Print*)
- Change device mode (*Verity Controller and Scan only*)



the administrator menu

- 1) Tap **Menu** to access the Main Menu.

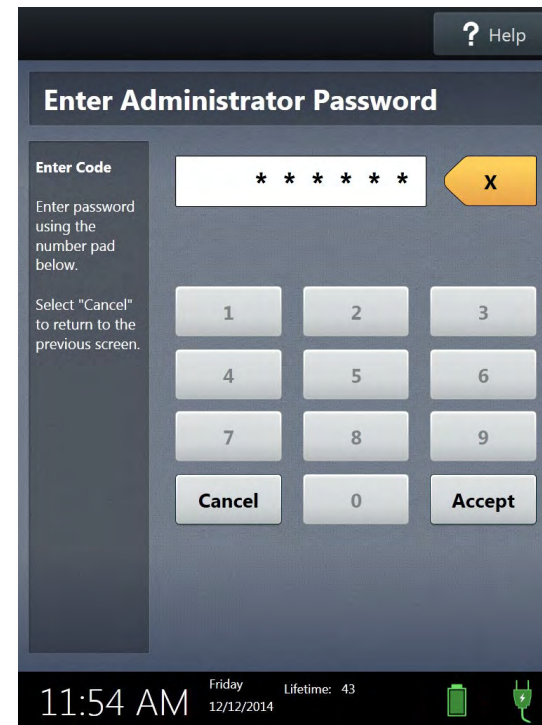
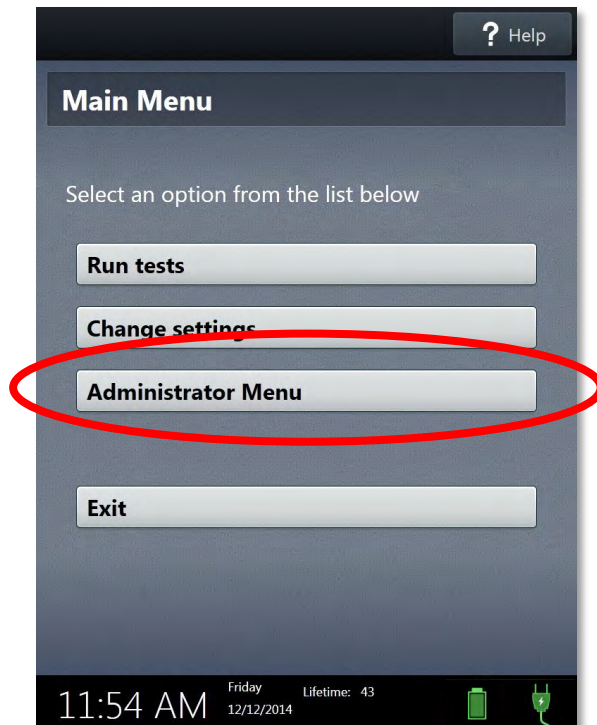
NOTE: On voter-facing devices (Touch Writer, Touch, Duo, Scan), if an election is loaded, press the blue Poll Worker button on the back of the device to access the Menu button.





the administrator menu

- 2) Select **Administrator Menu**.
- 3) Enter the Administrator passcode and select **Accept**.

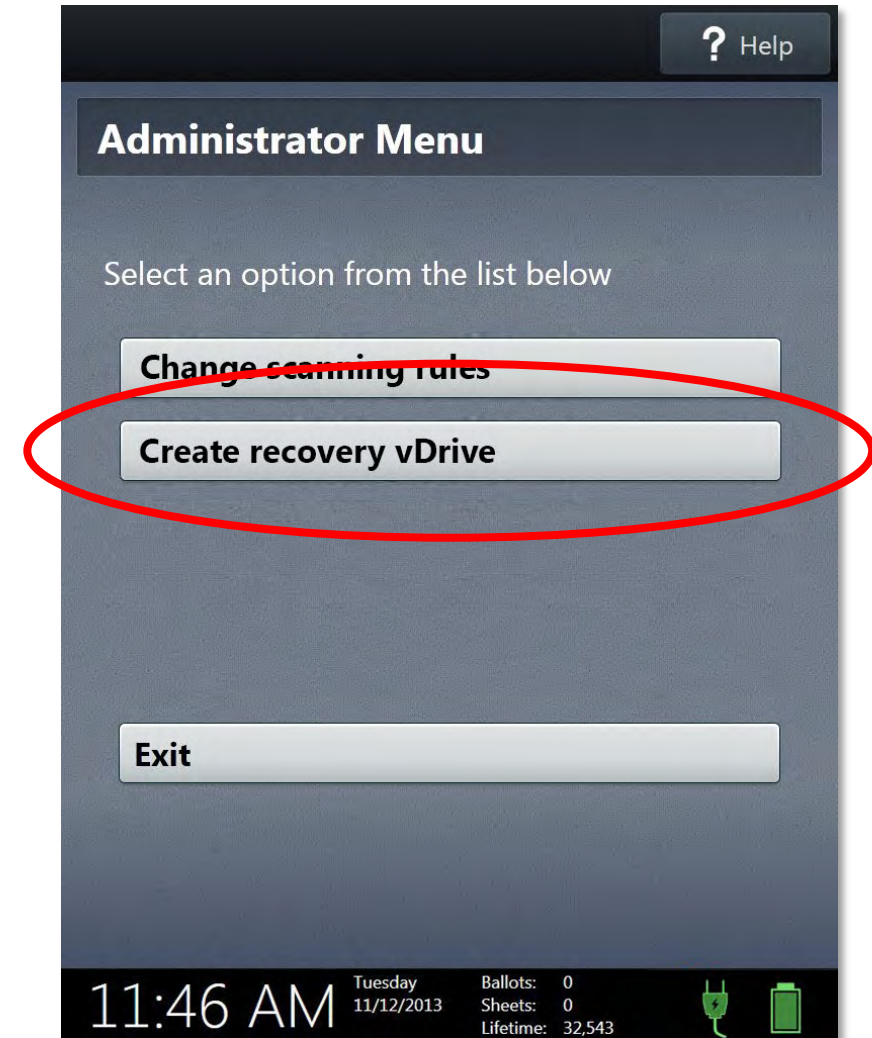


creating a recovery vDrive

Used to recover vote data if The original vDrive is lost or damaged.

A recovery vDrive cannot be read into the same task as the original vDrive.

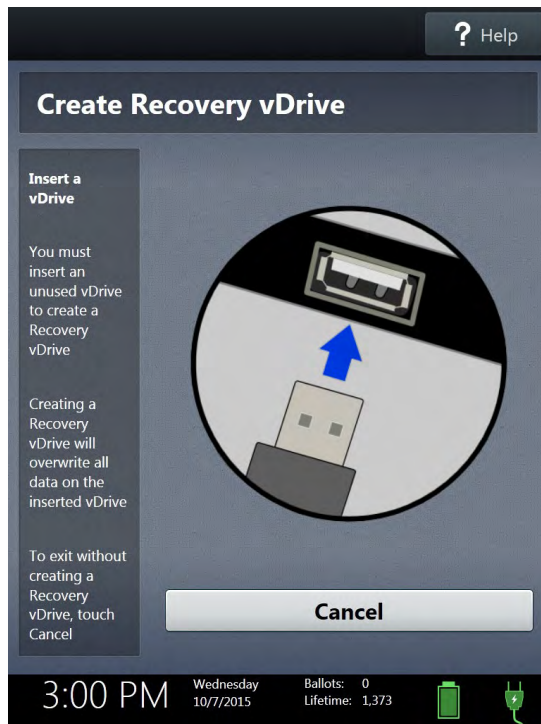
- 1) From the Administrator Menu, select **Create recovery vDrive**.





creating a recovery vDrive

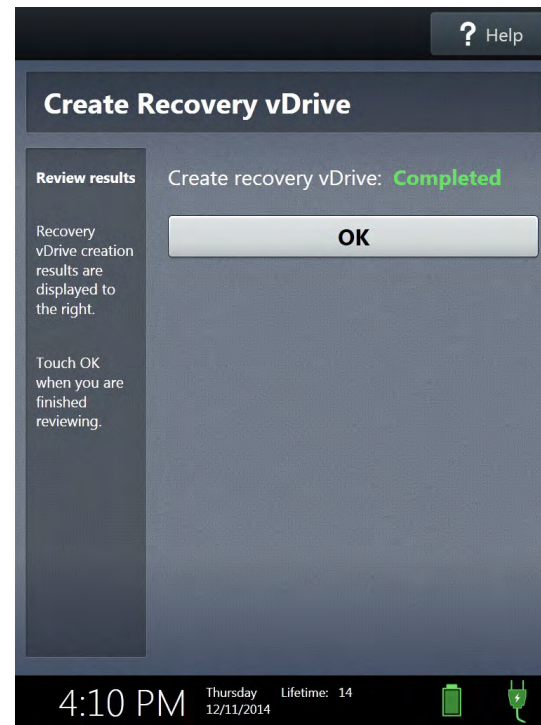
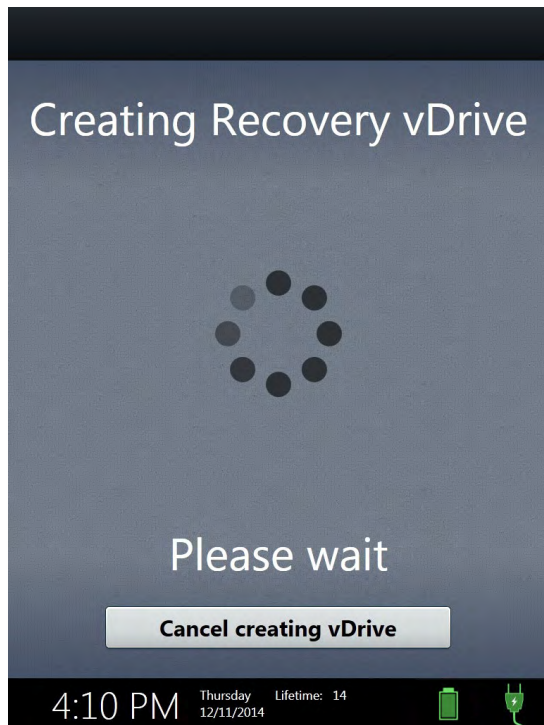
- 2) Insert a vDrive that has not been used previous in the election.
- 3) Select the election data you want to recover, and then select **OK**.





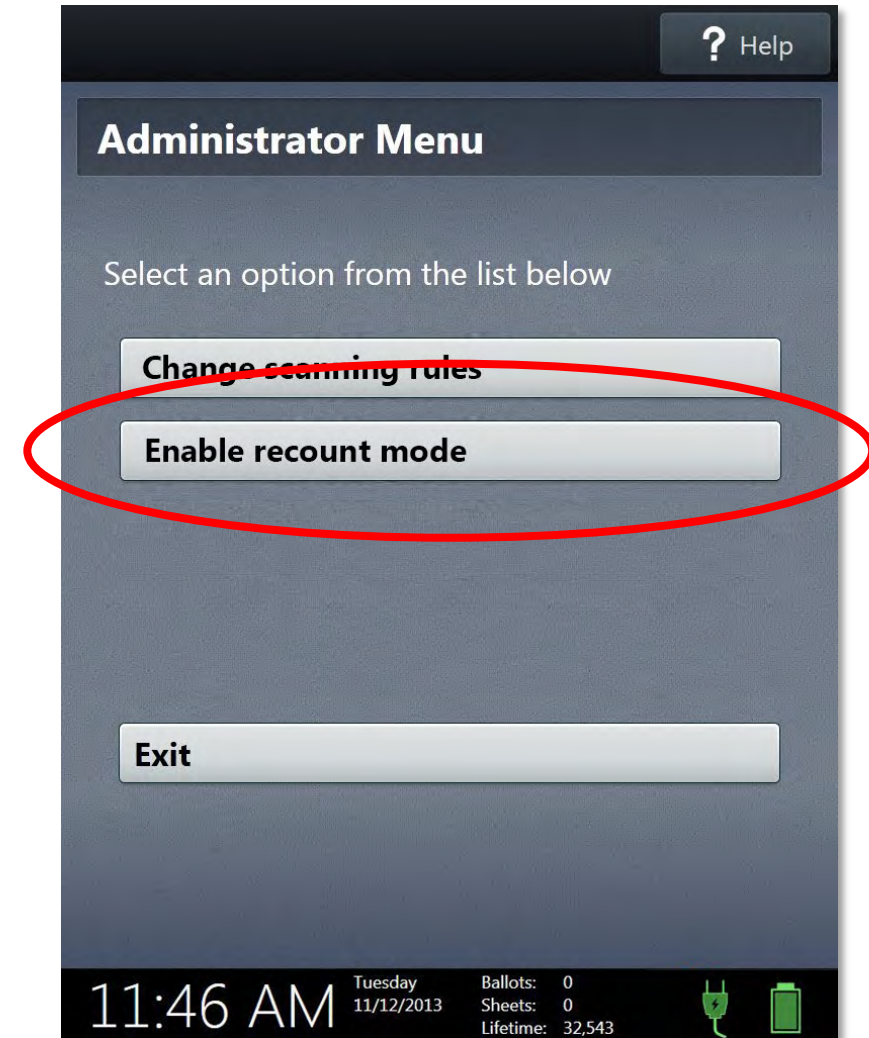
creating a recovery vDrive

- 4) Wait while the vDrive data is written.
- 5) Select **OK**. You can now remove the vDrive.



enabling recount mode

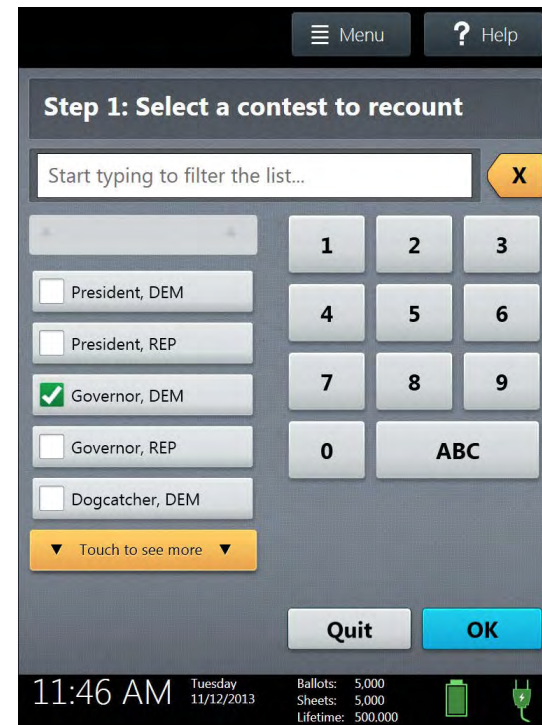
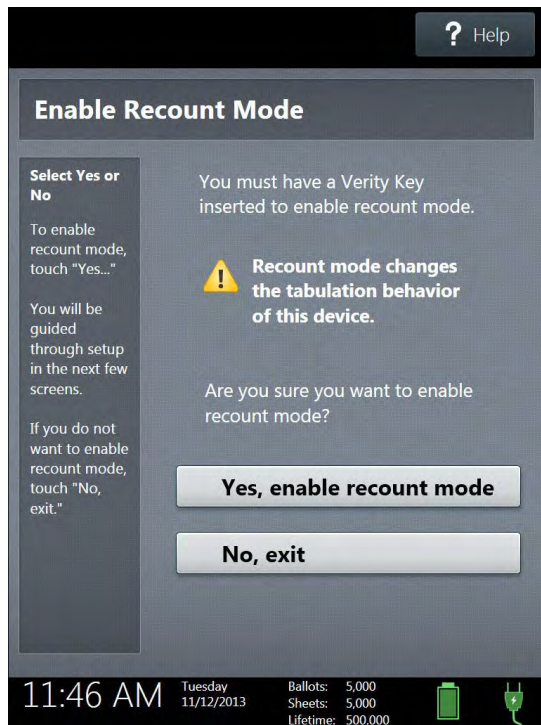
- May be used when conducting a recount using Verity Scan.
 - Can configure recount to include specific contests.
- 1) From the Administrator Menu, select **Enable recount mode**.





enabling recount mode

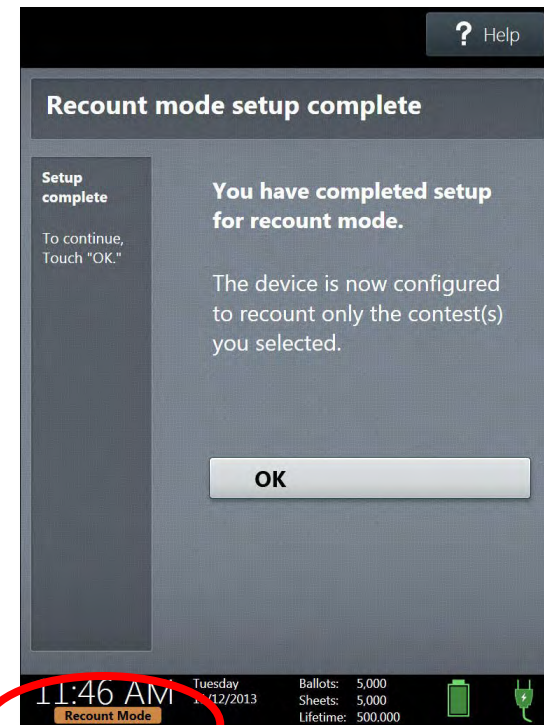
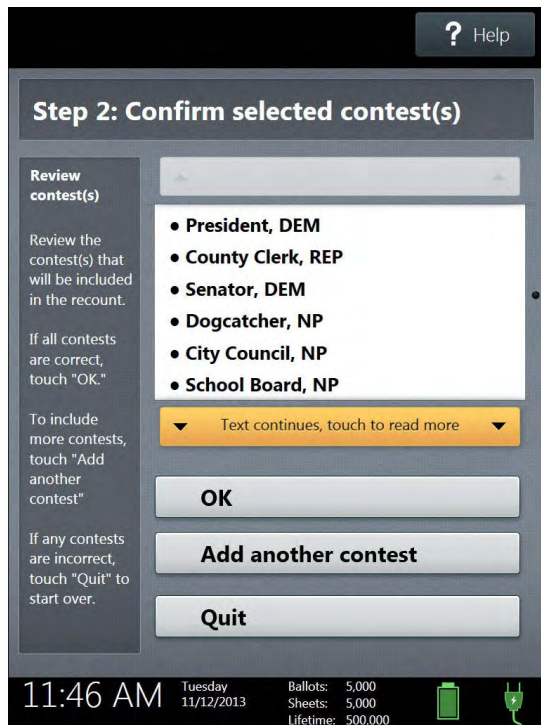
- 2) Select **Yes, enable recount mode** to confirm.
- 3) Select the contest(s) you want to recount, and then select **OK**.





enabling recount mode

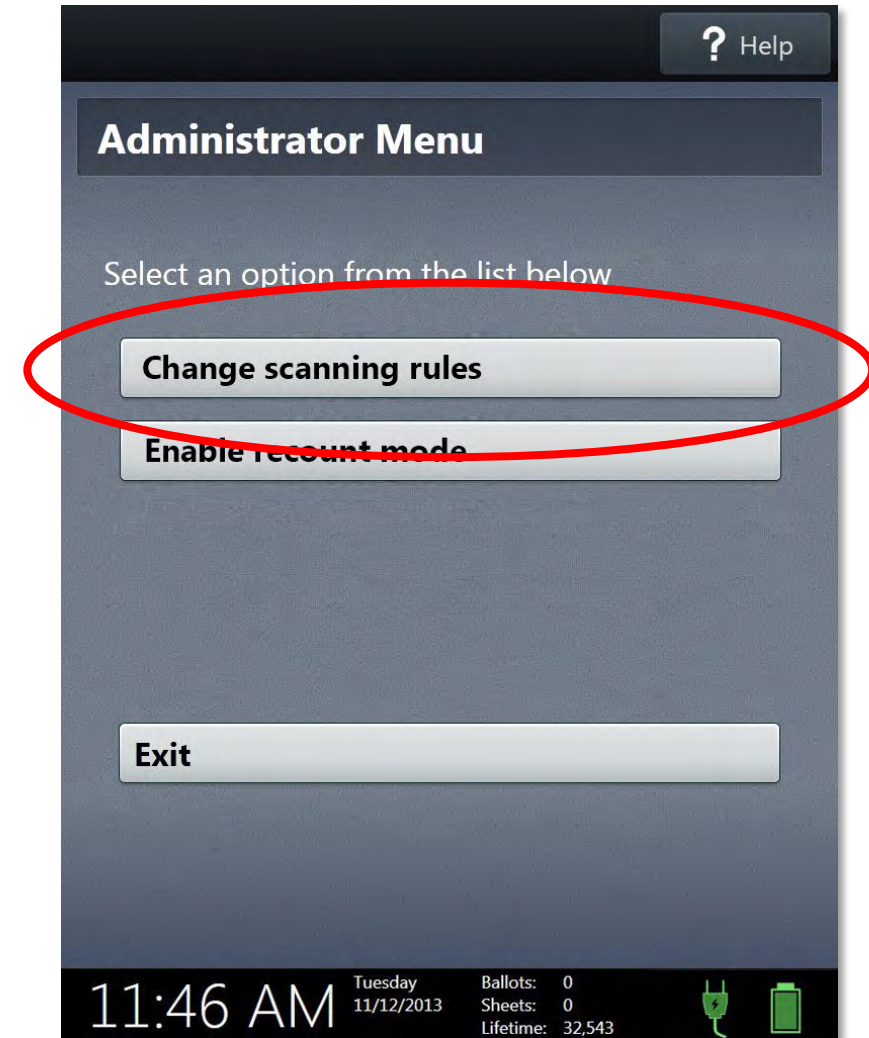
- 4) Select **OK** to confirm the selected contest(s).
- 5) Select **OK**. You can now begin scanning ballots.





changing scanning rules

- Used to override the Verity Scan second-chance voting settings from Build.
 - Changes remain in effect until device is restarted.
- 1) From the Administrator Menu, select **Change scanning rules**.



changing scanning rules

- 2) Set the desired ballot processing rules.
- 3) When finished, select **Exit**.

The screenshot shows a software interface for configuring ballot processing rules. At the top right is a 'Help' button with a question mark icon. The title bar reads 'Ballot Processing Rules'. Below this, there are eight rows of settings, each with a label and three checkboxes: 'Default' (checked), 'Accept', and 'Reject'. The settings are: Undervotes, Overvotes, Invalid Votes, Blank Ballots, Blank Pages, Marginal Marks, Marked Write-ins, and Provisional Ballots. At the bottom is an 'OK' button. The status bar at the very bottom shows the time '3:29 PM', the date 'Wednesday 10/7/2015', and counts for 'Ballots: 0', 'Sheets: 0', and 'Lifetime: 0'. There are also battery and signal icons on the right.

Rule Category	Default	Accept	Reject
Undervotes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overvotes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invalid Votes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blank Ballots	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blank Pages	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marginal Marks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marked Write-ins	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisional Ballots	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

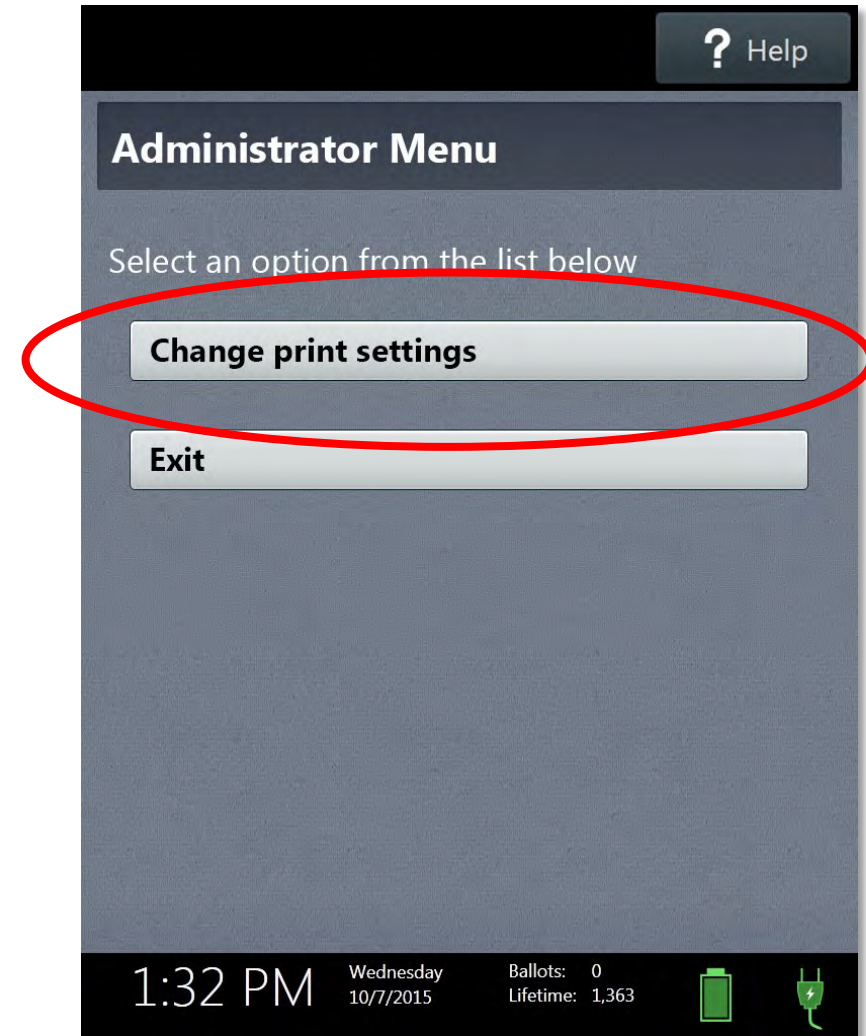
OK

3:29 PM Wednesday 10/7/2015 Ballots: 0 Sheets: 0 Lifetime: 0



changing print settings

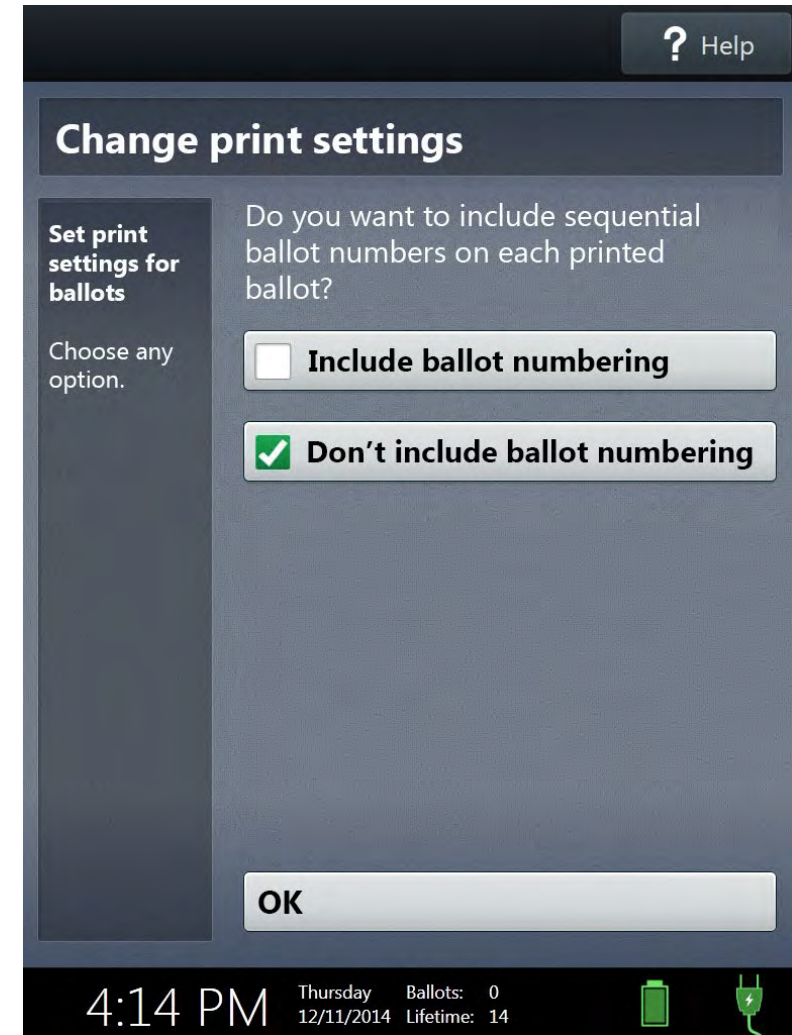
- Used to override Touch Writer/Print ballot numbering settings from Build.
- 1) From the Administrator Menu, select **Change print settings**.





changing print settings

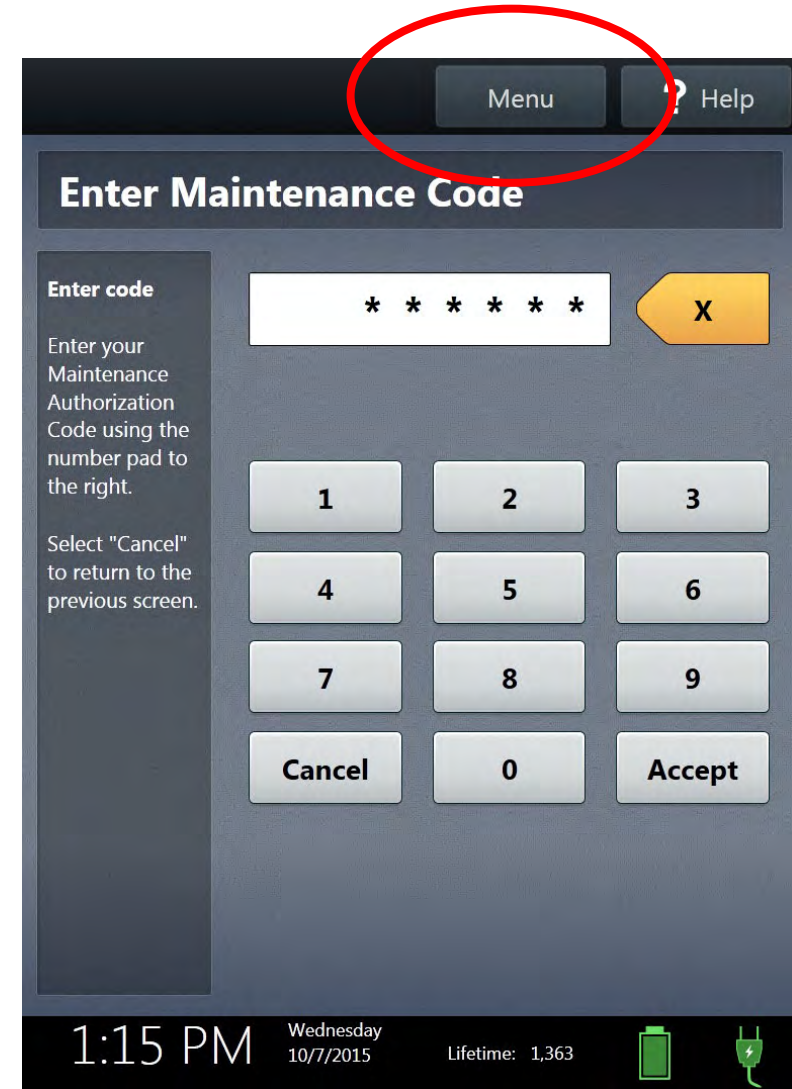
- 2) Select whether or not you want to include sequential ballot numbering on printed ballots.





changing device mode

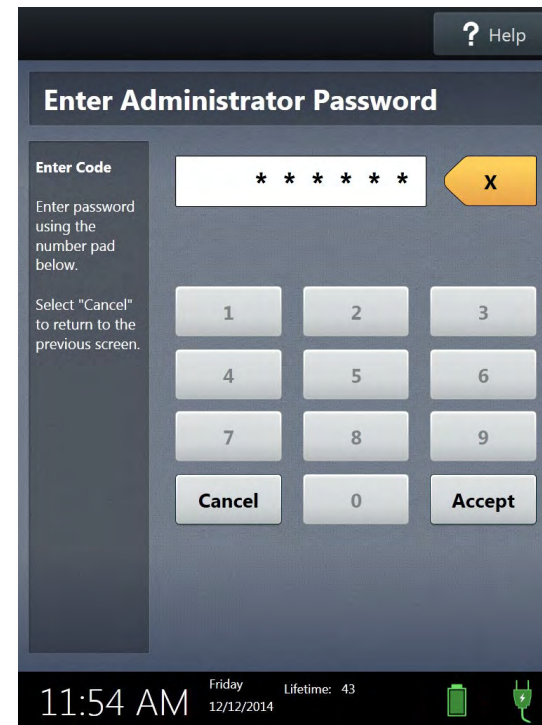
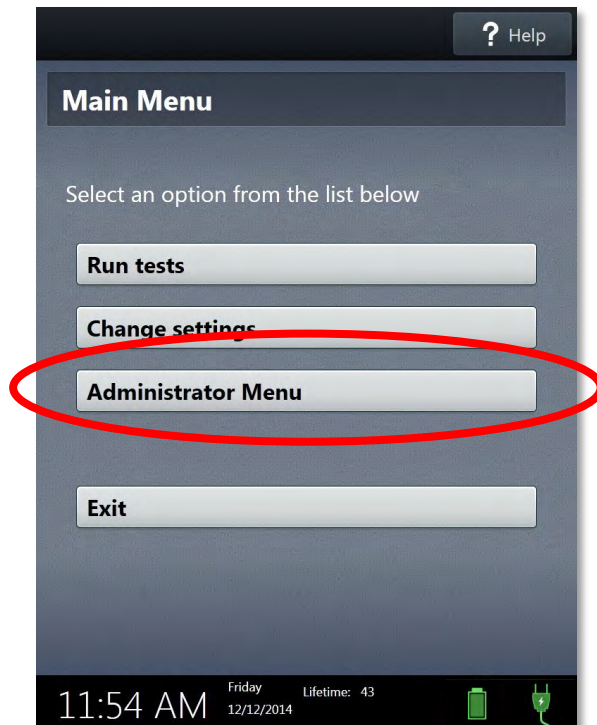
- Used to switch configuration of Controller/Scan for use with Touch Writer Duo or Touch/Touch Writer.
- 1) When loading an election, select Menu from the Enter Maintenance Code screen. From the Administrator Menu, select **Menu**.





changing device mode

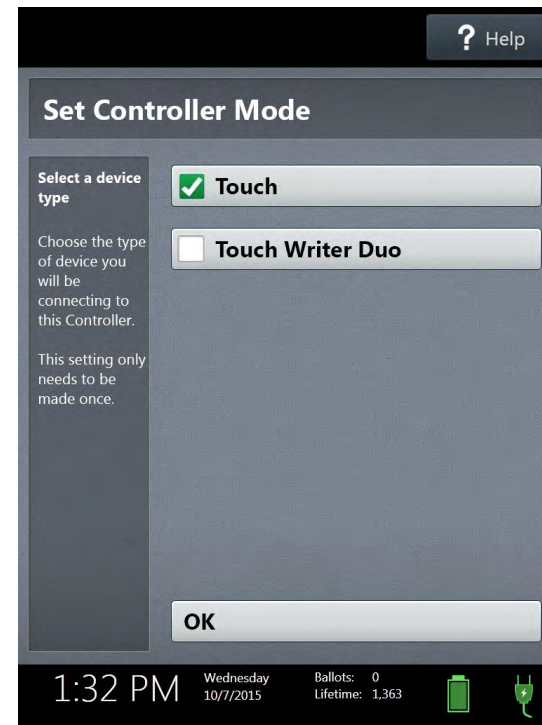
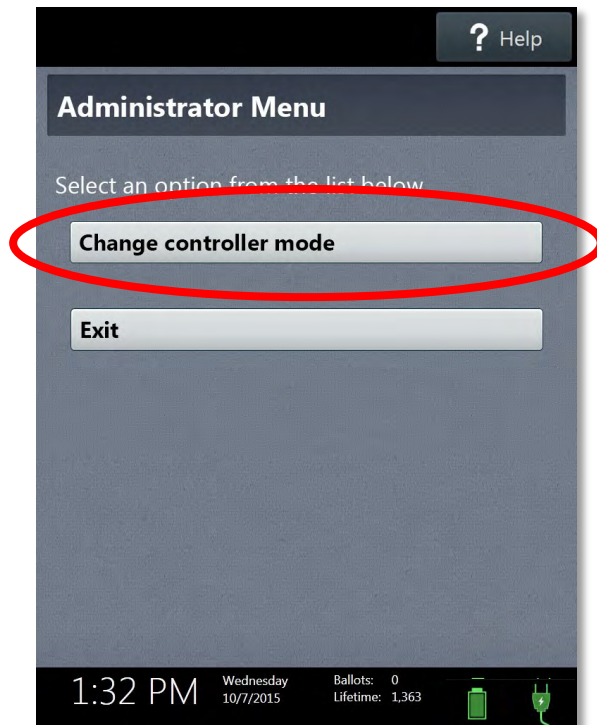
- 2) Select **Administrator Menu**.
- 3) Enter the Administrator passcode and select **Accept**.





changing device mode

- 4) Select **Change controller mode** *or* **Change scan mode**.
- 5) Change the mode to the desired setting, and then select **OK**.





conclusion

review: support procedures

support procedures: review

- Specifications & storage
- Acceptance testing
- Device functionality testing
- Device maintenance & settings
- Election preparation
- Election support
- Device administrator functions



questions?

About Hart Official Ballot Paper

Overview and Specifications

Hart Official Ballot Paper is the stock we print ballots on here at Hart InterCivic. We use this paper due to its low dust content, excellent toner adhesion, durability and security features. This document describes the specifications for Hart Official Ballot Paper. Commercial printers who are printing ballots for Hart customers should use either Hart Official Ballot Paper, or another quality paper that meets all specifications listed below, that produces minimal dust and maximum toner adhesion.

Hart Official Ballot Paper is a number one grade bond, laser guaranteed, 28# basis weight meeting the following minimum specifications (please refer to reverse side for terminology definitions):

Basis Weight: 28# Bond

Finish: Smooth Xerography

Grain: Short

Sheffield: 100-120

Brightness: 91-96

Content: Virgin wood fiber, 100% non-recycled content

Florescent Level: 4%

Moisture Content: 4.5%

Packaging: Moisture resistant ream wrap

Trim: +/- .025"

Squareness: +/- .0075"

Toner Adhesion: Mill treatment that allows optimum binding of toner and paper fibers

Standard Sizes (inches): 8.5 x 11, 8.5 x 14, 8.5 x 17, 11 x 17

Custom cuts are available for stubs, if needed.

Only Hart Official Ballot Paper meets the above basic specifications, while also including the addition of a **Trademarked Watermark**. This original watermark "Official Ballot", randomly repeating and readable in any orientation, securely identifies the paper as the original to assist in detecting fraud. Our trademarked paper is only available from Hart InterCivic.

Hart Official Ballot Paper Terminology Definitions

Grade Bond: Number1 - Number one grade paper is produced with 100% cellulose fibers. The process of creating a number 1 grade bond paper removes all impurities from the fibers that can affect the appearance and performance of the paper. The smoother digital and bond grade papers provide the best image quality.

Basis Weight: 28 # Bond - Paper weight is expressed in terms of basis weight, which is the weight of 500 sheets of a particular size. 28 # paper is created with a thickness to allow enough flexibility without additional curl. The 28# bond, a lower basis weight paper, tends to have a smoother finish.

Finish: Smooth Xerography - The finish is the smoothness of the paper contour. Toner is fused to paper by a combination of heat and pressure. Lower smoothness levels prevent grainy images achieving acceptable toner adhesion.

Grain: Short – A paper's grain is the direction in which most of the fibers lie. If a sheet of paper is folded across both the long and short dimensions, the fold with the grain will be smooth. The fold against the grain will be cracked and rough. Ballot paper grain should be short so that folded ballots (usually across the short dimension) do not flake toner or paper particles at these rough spots.

Sheffield: 100 – 120 - The smoothness of paper is determined by the Sheffield rating system. The smooth digital and bond grade papers provide the best image quality in digital printing applications.

Brightness: 91 – 96 - Brightness is a measure of the amount of light in a specific wavelength that a sheet reflects. The more light it reflects, the higher the brightness. High brightness significantly improves image quality.

Content: The virgin wood fiber contains no recycled contents. This ensures impurities are removed from the paper, which affect smoothness, moisture content and image quality.

Florescent level: 4% - Florescent whitening agents improve paper quality by enhancing the visual appearance of the printed sheet. The whitening agents are essential in creating high quality white paper.

Moisture Content: 4.5% - Almost all grade of paper has some percentage of moisture. The 4.5 % moisture content is the industry average while some grades of paper have much higher moisture content. Even a 1% variation of 4.5% can cause problems. The physical properties of the paper change as a result of variations in moisture content affecting its printability, performance and strength. Paper with high moisture contents tend to cause problems with post fuser curl, while papers with low moisture contents have a tendency to experience static causing problems with feeding and post print operations.

Packaging: The moisture resistant ream wrap ensures the proper moisture level of the paper is maintained.

Trim: +/- .025" - Allowable tolerance for trimming to specific sheet sizes.

Squareness: +/- .0075" - Allowable tolerance for squareness of the sheet. A simple example of squareness is folding a paper sheet in half and the corners line up exactly.

If you have any questions regarding the information contained in this Knowledge Base Article, please contact our Customer Support Center at 866-275-4278.

Ballot Printing Quality Assurance

Introduction

Quality assurance of paper ballots is of utmost importance in any election where Verity Central and/or the Verity Scan are used to process paper ballots. If ballot printing is not performed correctly, scanners may not read the ballots properly. This Knowledge Base article describes the importance of ballot inspection, introduces the use of a Ballot QC Overlay, and describes systematic instructions to inspect ballots.

Prior to each election, it is essential that a full quality check be conducted on ballot printing equipment, including checking for proper toner supplies, toner adhesion, printer drivers, and printer setup. It is also crucial to create test ballots prior to initiating "live" ballot production. If an off-site contract printer is used, the same procedures outlined here should apply to that vendor. Jurisdictions should use only contract printers approved for ballot printing via Hart InterCivic's Printer Acceptance Process in order to help with quality control.

Using Ballot QC Overlays

A Ballot QC Overlay is a clear film printed with targets for bar codes and margins. It is used to validate correct print dimensions for ballots printed directly from Verity Build, or by an offsite vendor. Hart InterCivic will supply one set of these film overlays at the time of implementation; additional system version overlays are available for purchase from Hart.

The Verity Voting System is designed to take into account digital printing variance, but any variance must be linear in nature. Allowable variance is defined by the three square targets, into which the upper left corner of all three barcodes must fit. Any ballot that does not meet this minimum specification should be rejected and reprinted. Sheet edge marks are for reference only. The ballot image should be centered on the sheet, but the critical reference point is the **point of origin**, and measurements should be made from this point. In addition, the ballot should be checked for skew (any rotation or tilting of the ballot printing), using the skew guides printed at the top and bottom of the overlay. See the following page for detailed guidelines for using Ballot QC Overlays with Verity ballots.

***NOTE:** Ballots printed with the Verity System use a separate set of overlays from those printed with the Hart Voting System (HVS). The overlays are clearly marked. Make certain that you use the correct overlay for the voting system that was used to print the ballots.*

Ballot QC Overlay Guidelines

Point of Origin
The upper left corner of the upper left barcode is the **point of origin** for all measurements. Align the point of origin on the Ballot QC Overlay with the upper left corner of the upper left barcode on the ballot.

Vertical Sheet Edge Guide
The sheet edge must fall in the shaded area $\pm 0.125''$, using the point of origin to anchor the overlay.

Horizontal Sheet Edge Guide
The sheet edge must fall in the shaded area $\pm 0.060''$, using the point of origin to anchor the overlay.

Sheet Edge Line
The clear interior line represents the optimal sheet edge

Skew Guides
0.040" between upper lines
0.020" between lower lines
Maximum front to back skew = 0.120"

Image Size Variance
The square target defines allowable image variance. With the upper left corner of the upper left barcode anchored at the **point of origin**, the upper left corners of the lower barcodes must fit within the target area of the large square. Optimal printing has the barcodes fitting within the smaller square as shown.

Ballot Inspection Best Practices

Even in the best environments, with well-maintained equipment, highly trained operators and the finest materials, defects in ballot printing can occur. Accordingly, inspection of the printed ballot is fundamental to optimal performance of the Verity Voting System. When a defect is suspected, it must be resolved. Test ballots should be printed and inspected before the first production run is printed. Recommended best practices for ballot inspection include:

- Make certain that folds will not pass within 5/8" of bar codes.
- Make certain that folds will not pass through any option boxes.

NOTE: The Verity Build ballot preview toolbar allows you to check fold placement prior to printing (see the Verity Build Administrator's Guide, Chapter 3 for details).

- Inspect the first ballot of each precinct, or every 500 ballots, whichever is less.
- Check ballots printed before and after any paper jam.
- Verify that all ballots are printed on Hart Official Ballot Paper, or similar stock. For further information, see the Verity Knowledge Base article *About Hart Official Ballot Paper*.
- Verify grain direction – "Official Ballot" watermark must run in same direction as ballot copy.
- Validate correct position of rounded corner, if used.
- Match up proof information with printed ballots, front and back, and confirm that no components are missing.
- Using the appropriately sized ballot overlay, check the size of ballot area box (rectangular outline surrounding all election copy).
- On the same ballots, use the overlay to check barcode alignment and position. Use the overlay to check for the presence of skew. Check both the front and back of the ballot. See page 2 for details.
- Verify that all human-readable numbering is present.
- Inspect the ballot for obvious voids, smears, or toner that is too light or dark.
- Look for "ghosts" and double images.
- Check for toner spray or spots in white areas, especially inside option boxes.
- Check for toner voids, especially on the edges of option boxes.
- Look for paper defects, wrinkles, tears and creases.
- Inspect for toner spots in or near names, options boxes, or bar codes.
- If a defect is observed, make note of it. Check for a recurring problem by carefully inspecting the same area on the immediately preceding and following ballots.
- If a defect is confirmed, the ballot should be reprinted. Follow secure chain-of-custody procedures to ensure that the defective ballot is exchanged for the reprinted ballot.
- All defective and replaced ballots should be accounted for. Someone should be responsible for barcode strikethrough, retention, and/or destruction of replaced ballots, and for securing retained ballots so that no possibility exists for their re-introduction into the printed ballot supply for the election.

If you have any questions regarding any of the information contained in this document, please contact the Hart Customer Support Center at 866-ASK-HART (866-275-4278).



Polling Place Field Guide

VERSION 2.3



©2019 Hart InterCivic
All Rights Reserved

Hart InterCivic and Verity are registered trademarks of Hart InterCivic, Inc.



Document Number 6651-013 B

Hart InterCivic Quality and Information Security Policy

Hart InterCivic is committed to consistently providing high quality products and services for its customers through adherence to its established hardware and software Quality Management Systems, complying with customer, statutory and regulatory requirements, and a commitment to continual improvement. Hart InterCivic is also committed to the integrity and the security of the information used in the product development process, in the products themselves, and in our management of customer data during the implementation process.

This DOCUMENT and the SOFTWARE, HARDWARE, and FIRMWARE to which it pertains contain confidential and proprietary information belonging exclusively to Hart InterCivic, Inc. No part of this publication may be modified, reproduced, stored in a retrieval system, or transmitted in any form, distributed by any electronic or mechanical means, photocopied, recorded, or otherwise reproduced or distributed without prior written permission from authorized personnel at Hart InterCivic, Inc. Any person receiving this document has a duty to take reasonable precautions preventing unauthorized use or disclosure of the contents.

Trademarks

Hart InterCivic and Verity are registered trademarks of Hart InterCivic, Inc.

Hart InterCivic disclaims any proprietary interest in the marks and names of others.



Hart InterCivic, Inc.
15500 Wells Port Drive
Austin, TX 78728
Help Desk: 866.275.4278 (866.ASK.HART)
Document Number 6651-013 B

© 2019 Hart InterCivic, Inc.
All Rights Reserved

about this guide

This *Verity Polling Place Field Guide* is a portable guide to polling place tasks using the Verity Scan and Verity Touch Writer devices.

7. Press the *red* power button on the back of the Verity Touch Writer to power it off. ▶



IMPORTANT: Wait for the Verity Touch Writer to be completely powered down and showing a black screen if you will be unlocking and removing the tablet. If stowing the tablet, make sure to lock it in with the key *and* pull the blue latch down to secure it in place.

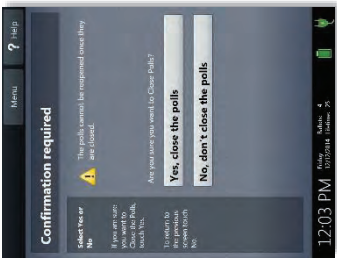
NOTE: The Verity power cord has a locking connector. When inserting the connector into a Verity device, it will make a small “click.” To disconnect the power cord, grasp the cord at the base of the black connector molding where it connects to the Verity device, and slide back the sleeve. This will unlock the connection so that the cord may be removed.

8. Follow your local jurisdiction’s guidelines, including chain-of-custody procedures, when transferring equipment, vDrives, and/or ballots to your central counting location. If you are leaving equipment in place, be sure to properly secure all equipment, preferably behind a locked door. You may use the space below to document local transfer procedures.

local procedures

4. Select **Yes**, close the polls. ▶

IMPORTANT: Once polls have been closed, they cannot be reopened on that Touch Writer.



5. Enter the Close Polls Code and select **Accept**. The Close Polls report will print automatically. ▶



6. The polls are now closed. Print and file reports available on the screen as required by your jurisdiction. The available reports may vary and are configured by the election officials in your jurisdiction. You may use the space below to document local requirements.

local reporting requirements



Polling Place Field Guide



VERSION 2.3

Verity Scan	5
setting up Verity Scan	6
setting up the ballot box	6
setting up the Verity Scan	9
Verity Scan orientation	12
screen orientation	12
poll worker button	13
report printer operation	13
opening polls	14
reopening polls	16
voting with Verity Scan	17
overview: Verity Scan	17
instructions for hand-marking ballots	17
scanning ballots with Verity Scan	17
Verity Scan help and features	18
troubleshooting	18
spoilng printed paper ballots	19
undervotes, overvotes, and blank ballots on Verity Scan	19
provisional ballots	19
the emergency ballot bag and emergency ballot slot	20
multi-sheet ballots and Verity Scan	20
suspending polls	21
closing polls	23
Verity Touch Writer	26
setting up Touch Writer	27
setting up the ballot printer	27
setting up the voting booth	29
setting up the Verity Touch Writer	31
Touch Writer orientation	35
screen orientation	35
poll worker button	36
about Verity Access	36
installing headphones and tactile switches	36
report printer operation	37
opening polls	38
reopening polls	40
voting with Touch Writer	41
overview: Verity Touch Writer	41
activating a ballot	41
marking ballots with Verity Touch Writer	43
making write-in choices	47
printing blank ballots	47
substitutions in <n of m> contests	47
voting session idle timeout	47
Verity Touch Writer help and features	48
troubleshooting	48
spoiling a ballot on Verity Touch Writer	49
spoilng printed paper ballots	49
printing a summary report	50
provisional voting on Verity Touch Writer	50
suspending polls	51
closing polls	53

closing polls

IMPORTANT: Wait until the close polls time to close polls. Once polls are closed they cannot be reopened on that Touch Writer.

1. Press and hold your finger on the **Ready for Use** button on the Touch Writer screen, or, alternately, press the blue poll worker button on the back of the Verity Touch Writer.

2. Select **Menu** at the top of the screen. ▶



3. Select **Close Polls**. ▶



5. The polls are now suspended. Print and file reports available on the screen as required by your jurisdiction. Available reports may vary and are configured by the election officials in your jurisdiction. You may use the space below to document local requirements.

local reporting requirements

6. When you have finished printing reports, press the red power button on the back of the Verity Touch Writer to power it off. ▶

IMPORTANT: Wait for the Verity Touch Writer to be completely powered down and showing a black screen if you will be unlocking and removing the tablet. If stowing the tablet, make sure to lock it in with the key and pull the blue latch down to secure it in place.



7. Follow your local jurisdiction’s guidelines, including chain-of-custody procedures, when transferring equipment, vDrives, and/or ballots to your central counting location. If you are leaving equipment in place, be sure to properly secure all equipment, preferably behind a locked door. You may use the space below to document local transfer procedures.

local procedures

Verity Scan

Verity Scan is a polling place-based digital scanner for scanning and casting ballots. Verity Scan can be used with hand-marked ballots or with ballots marked and printed using Verity Touch Writer (see page 26). Verity Scan deposits scanned ballots into its ballot box for secure storage.



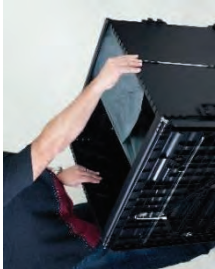
vDrives are used to transfer digital ballot styles from the Verity election definition software to Verity Scan, and to transfer voted ballots from Verity Scan to Verity software for tabulation. vDrives are inserted into a standard USB port located in a locked and sealed compartment; each Verity Scan has its own vDrive.

NOTE: Software startup for each unit may take several minutes, due to security and data integrity checks that the Verity software performs. This process is included in the design of the Verity Voting System to verify the authenticity of the software before allowing it to operate.

setting up Verity Scan

setting up the ballot box

1. Position the folded ballot box as shown. ▶
2. Unlatch the four clips (two on each side). ▶
3. Pull open the ballot box. ▶
4. Press the side panels outward until they are flat, being careful not to pinch your hands or fingers. ▶



suspending polls

(Early Voting)

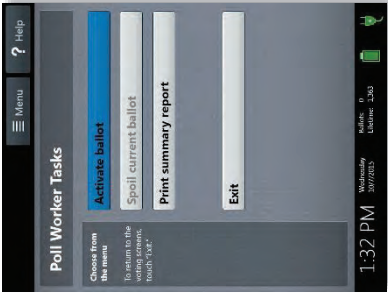
1. Press and hold your finger on the **Ready for Use** button on the Touch Writer screen, or, alternately, press the blue poll worker button on the back of the Verity Touch Writer.
2. Select **Menu** at the top of the screen. ▶
3. Select **Suspend Polls**. ▶
4. Enter the Suspend Polls Code and select **Accept**. A Suspend Polls report will print automatically. ▶



printing a summary report

You can print a ballot marking session summary report on Verity Touch Writer at any time. This report lists the number of ballots printed, active sessions, sessions in progress, and ballots spoiled.

1. Press and hold your finger on the Ready for Use button on the Touch Writer screen, or alternately, press the blue poll worker button on the back of the Verity Touch Writer.
2. Enter the Poll Worker Code and select **Accept**.
3. Select **Print summary report**. ▶



provisional voting on Verity Touch Writer

Follow local procedures for provisional voting, as determined by local and state rule and code.

If your jurisdiction procedures permit, poll workers may issue a provisional access code using Verity Touch Writer by selecting **Mark as provisional** on the Confirm Access Code screen. A provisional voter will then use this code to access, vote, and print a provisional ballot.

IMPORTANT: Verity Scan will not accept provisional ballots printed from Touch Writer. Follow local procedure to process provisional ballots.

5. Lower the bottom panel but do not press down. ▶



6. Release the lid by unhooking the 3 straps. ▶



7. Pull the string on the underside of the lid upward to unlock the lid latch. ▶



8. Lift the lid while gently pulling upward and outward, ensuring that the double hinge is fully extended. Lay the lid across the top of ballot box, and then press it down. Do not force it. ▼



9.
- Unlock the front door with the ballot box key. ▶



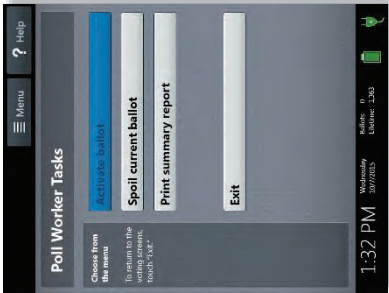
10.
- Press firmly on bottom panel to lock it in place. ▼



spoiling a ballot on Verity Touch Writer

The Spoil Current Ballot menu allows you to spoil (discard) the current active ballot before it is printed.

1.
- Press the blue poll worker button on the back of the Verity Touch Writer.
2.
- Enter the Poll Worker Code and select **Accept**.
3.
- Select **Spoil current ballot**. ▶



4.
- Select **Yes, spoil the ballot**.
5.
- Select **OK**. Fill out and file any paperwork required by your jurisdiction.

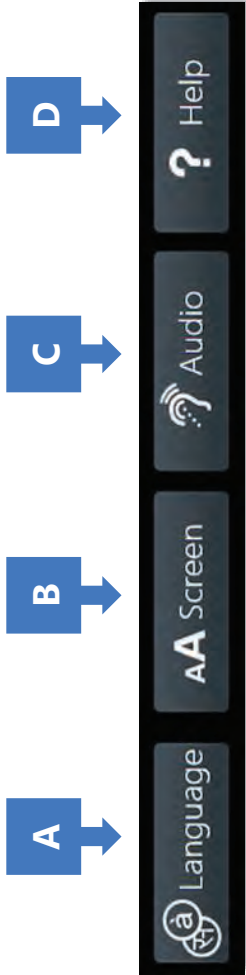
spoiling printed paper ballots

To spoil a ballot that has already been printed from Verity Touch Writer, or to spoil a preprinted paper ballot, follow your local procedures (for example, filling out a spoiled ballot log and envelope).

Verity Touch Writer help and features

Each Verity Touch Writer is equipped with context-specific help text and settings that can be accessed from the touchscreen, or using Verity Access. To exit help or settings screens and resume voting, select **Exit Help** or **Return to ballot** on the bottom right.

- If multiple languages are available, a **Language** button is located at the top left of the screen. Voters can select this button to change the language of the instructions and ballot.
- Voters can select the **Screen** button to change the screen settings (contrast and text size), or to turn the screen off (if using headphones only).
- Voters can select the **Audio** button to change the audio settings (volume and speed) for the headphones.
- The **Help** button is at the top right of the screen. Voters can select this button to see help text for the voting step currently underway.



troubleshooting

If there is a problem with the Touch Writer, follow the error instructions on the screen (if applicable), and/or contact your elections office for assistance.

setting up the Verity Scan

1. Assemble the ballot box, if this has not been done already (see page 6).



2. Place the Verity Scan on the ballot box, aligning footpads with the indentations. The handle on the Verity Scan must face the front of the ballot box. ▶



3. Reach inside the ballot box and pull the cord down and away from you to lock the lid and the Verity Scan in place. ▶



4. Close and lock the front ballot box door. ▶



5. Follow local procedures to remove the tamper seal from the Verity Scan handle, if applicable. Unlock the case (if locked). Open the case and remove the power brick and power cord from the storage compartment. Close the compartment and case. ▶

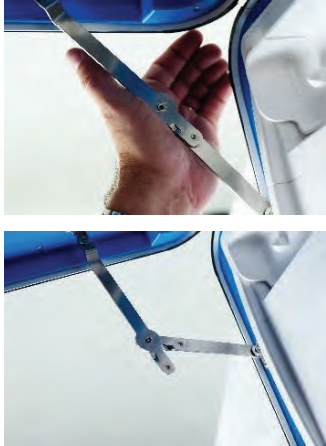
6. Plug the power cord into the power brick, and then plug the power brick into the back of the Verity Scan (flat side up). ▼

IMPORTANT: Do not plug the power cord into the wall yet.



7. Open the Verity Scan case and lock the lid brace in place. ►

IMPORTANT: Never tilt a device up by the handle while cords are connected – this can damage the cord where it connects to the device, or cause damage to the device itself.



8. Unlock (A), unlatch (B), and remove (C) the tablet. ▼



making write-in choices

To vote for a write-in candidate on the ballot (if applicable):

1. On the page for that contest, the voter selects **To enter a write in, touch here**.
2. The voter types the name of the desired write-in, using the touchscreen or Verity Access, and then selects **Accept**.
3. The voter's write-in choice will appear with a green box with check mark to its left, along with the write-in candidate name that the voter typed.

NOTE: *If a voter attempts to deselect a marked write-in choice, they will be asked to confirm before proceeding.*

printing blank ballots

If the voter has marked no choices and selects the Print button, Verity Touch Writer will ask the voter to confirm before printing the blank ballot.

substitutions in <n of m> contests

In a contest with more than one valid choice (e.g. 'vote for one, two or three'): If the voter has already selected the allowed number of choices, and then selects an additional choice, Touch Writer will indicate which previous choice is being changed, and which new selection is being added.

voting session idle timeout

If the 'idle session' setting has been activated by election officials, then a warning will appear after 5 minutes of inactivity; if the voter does not respond to the warning within 45 seconds, the Touch Writer will display the "Session Locked" screen. When the session is locked, a poll worker may either spoil the ballot, or unlock the session and allow the voter to continue voting.

9. The voter selects **Yes, print my ballot.** ▶



10. The voter retrieves the printed ballot from the laser printer next to their Verity Touch Writer. ▶



- If your polling place is equipped with Verity Scan, the voter will take their printed ballot to the Verity Scan device to cast their ballot.

9. Seat the tablet in the cradle (A), tilt it back (B), and lock it in place (C). ▼



10. Verify the Verity Scan device seals, per local procedure. Attach privacy screens to each side of the ballot box, if applicable. ▶



11. Plug the power cord into AC power. A green light should illuminate on the power brick when AC power is present. ▶



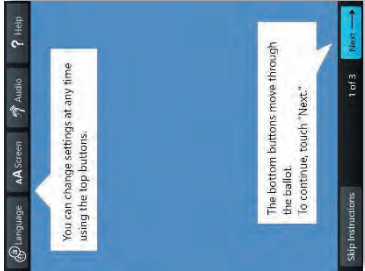
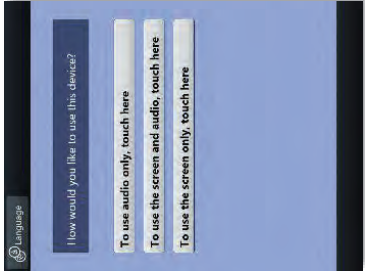
12. Press the *red* button on the back of the Verity Scan to power it on. ▶



- During the power on process, a Power-On Self Test report will print on Verity Scan's built-in printer. This report will indicate any hardware or connection issues; if any issues are noted, check connections and restart the device using the red power button.

3. The voter selects whether to use the screen, audio, or both to complete their ballot, and then adjusts their audio and/or screen settings.

- If the voter chooses to use both the screen and audio, they will then be walked through the audio settings and screen settings before proceeding. The voter selects **OK, it sounds good/OK, it looks good** in the bottom right to proceed.
- If the voter chooses to use the screen only and turn off the audio, they will be asked to confirm before proceeding, by selecting **Yes, turn it off**. The voter will then be walked through the screen settings before proceeding. The voter selects **OK, it looks good** in the bottom right to proceed.
- If the voter chooses to use the audio only, they will be asked to confirm before proceeding, by selecting **Yes, turn it off**. The voter will proceed through their ballot using the Access device with headphones. The voter can **select Touch here to enable the screen** to turn the screen display on at any time.



4. The voter is presented with three screens of instructions that orient them to the Touch Writer device. The voter can select **Next** to view each instructional page, or select **Skip Instructions** to go to their ballot. ▶

- On the last page of instructions, the voter selects Start in the bottom right to begin marking their ballot.
- The Language (if applicable), Audio, and Screen settings and the Help button are also available (see page 48).

poll worker button

The blue poll worker button is located on the back of Verity Scan. This button is used when suspending or closing polls. In some jurisdictions, this button may be used when scanning ballots with undervoted or overvoted contests; see page 19.



report printer operation

1. The thermal report printer is located on the right-hand side of Verity Scan. ▶



2. To open the paper compartment: While standing in front of the device, pull the lever on the top of the printer cover towards you, and then lift up to open the paper compartment. ▶



3. To replace paper: Place the new paper roll into the printer as shown. Paper must roll up from the bottom. ▶



4. Close the printer cover. The paper must extend out from underneath the front edge of the cover. The white button can be used to advance the paper. ▶



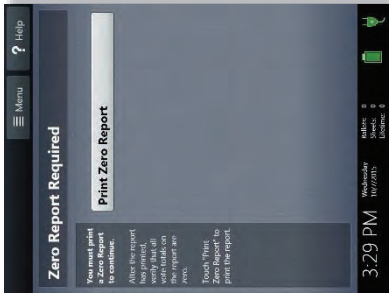
opening polls

You must open polls on the first day that voting will occur on that device. For instructions on reopening polls on the second or subsequent day of multiple-day voting events, see page 16.

1. Set up and power on the Verity Scan. **Confirm that you are running on AC power** (see page 12).

2. Select **Print Zero Report**. ▶

NOTE: *If you are reopening polls during subsequent days of a multiple-day voting event, then you will not print a Zero Report. See page 16.*



3. Wait while the Zero report prints (on the built-in report printer). Using the Zero report, check the following:

- Verify the ballot count total on the Zero report is ZERO and enter it in the Reconciliation Log.
- Verify that the polling place on the report is correct.

IMPORTANT: *If these items are incorrect, contact your elections office.*

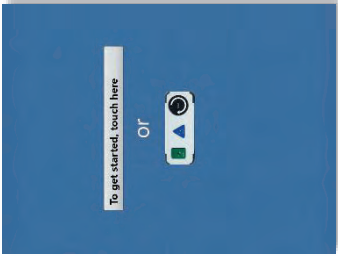
4. Verify that the clock in the bottom left corner of the screen displays the correct time.

IMPORTANT: *If the clock is incorrect, contact your elections office.*

marking ballots with Verity Touch Writer

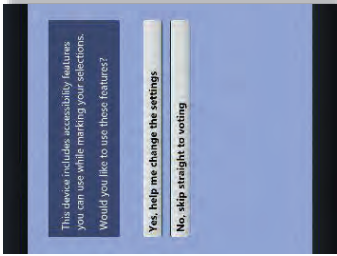
Once a poll worker has activated a ballot (page 41):

1. The voter selects **To get started, touch here** (or turns the Move wheel on Verity Access clockwise).
 - If multiple languages are available, a “get started” button will appear in multiple languages. The voter selects the button with their preferred language.
 - The language selected applies to both the device instructions and the ballot.
 - The language settings can be changed at any time by accessing the language menu (see page 48).



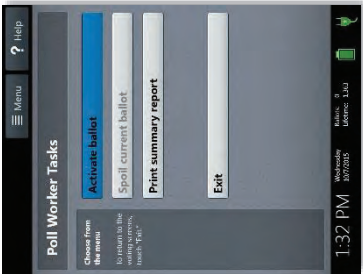
2. The voter chooses whether they would like to use the Verity Access accessibility features.

- If the voter chooses **Yes, help me change the settings**, they will proceed to the next step.
- If the voter chooses **No, skip straight to voting**, they will be taken to the About Your Ballot screen (page 45, step 5)



4. Select **Activate ballot.** ▶

If your jurisdiction has **Verity AutoBallot**, after activating the ballot, you can use the barcode reader attached to the Verity Touch Writer to scan barcode labels produced by your electronic pollbook. When using AutoBallot, you will scan the barcode, skipping steps 5-6 of this section.



5. Choose the correct precinct from the list and select **OK.** ▶

- (Closed Primary Elections only) After choosing the precinct, select the Party, if applicable.



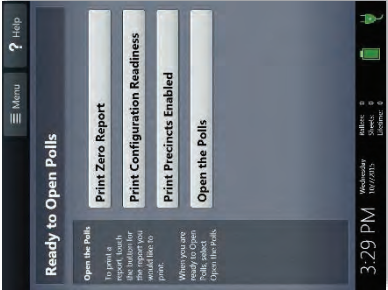
6. Confirm the selections you have made, and then select **Yes, activate this ballot.** ▶

- If the precinct and/or party are incorrect, select **No, cancel** to return to the main menu.
- To issue a provisional access code, select **Mark as provisional**; for more information on provisional voting, see page 50.



5. Select **Open the Polls.** You can also print a Configuration Readiness report, Precincts Enabled report, or additional copies of the Zero report, if your jurisdiction requires them. ▶

IMPORTANT: Once you open polls, you can no longer print a Zero report.



6. Enter the Open Polls Code, and then select **Accept.** The Open Polls report will print. ▶



7. Wait while the Open Polls report prints. File the Zero and Open Polls reports according to local guidelines.

reopening polls

(Early Voting)

1. To reopen polls after polls have been suspended, power on the Verity Scan.
NOTE: *When reopening polls, you will not print a Zero report.*
2. Enter the Open Polls Code, and then select **Accept**. The Open Polls report will print. ▶



3. Wait while the Open Polls report prints. File the Open Polls report according to local guidelines.

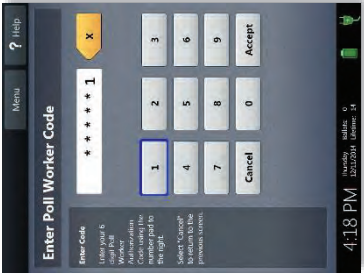
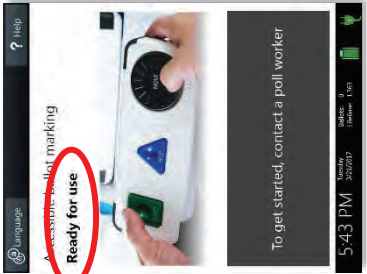
voting with Touch Writer

overview: Verity Touch Writer

Verity Touch Writer is an accessible ballot marking device. On Verity Touch Writer, poll workers will activate a ballot, and then allow the voter to begin voting. When they are finished voting, the voter will print the marked ballot. The voter can then verify their choices using Verity Reader (if available). The voter will cast their ballot using Verity Scan, or into a ballot box to be processed centrally.

activating a ballot

1. When the device is ready to be used for marking ballots, the “Ready for Use” screen will display.
2. Press and hold your finger on the **Ready for Use** button to continue (or, alternately, press the blue poll worker button on the back of the Touch Writer). ▶
3. Enter the Poll Worker Code and select **Accept**. ▶



reopening polls

(Early Voting)

1. To reopen polls after polls have been suspended, power on the Verity Touch Writer.

NOTE: *When reopening polls, you will not print a Zero report.*

2. Enter the Open Polls Code, and then select **Accept**. The Open Polls report will print. ▶



3. Wait while the Open Polls report prints. File the Open Polls report according to local guidelines.

voting with Verity Scan

overview: Verity Scan

Verity Scan is a polling place-based scanner used to scan and cast paper ballots whether they are hand-marked, or marked using Verity Touch Writer (for Touch Writer instructions, see page 26).

instructions for hand-marking ballots

1. The voter fills in the selection box to the left of their choices completely using blue or black ink.
2. When the voter has finished marking their ballot, they take the ballot to Verity Scan to cast their ballot.

scanning ballots with Verity Scan

1. Verity Scan is ready to scan when you see the **Ready** to **Use** screen. ▶

IMPORTANT: In elections with multi-sheet ballots, voters must receive all sheets for their ballot. Voters should be instructed to scan all sheets of their ballot, even if they have made no choices on a particular sheet. See page 20 for more information.



2. The voter removes the ballot privacy sleeve (if applicable) and inserts the voted ballot into Verity Scan. Flashing green arrows indicate the location and direction of the scanner feed. Ballots must be fed short-edge first, but may otherwise be scanned in any orientation. ▶



3. After scanning their ballot, the voter waits a moment while the ballot is processed. ▶



4. The voter’s ballot has been cast when Verity Scan displays the American flag. If enabled, an audible chime will also sound. ▶



Verity Scan help and features

The **Help** button is located at the top right of the Verity Scan screen. This button provides the voter with help text for the voting step currently underway. Select **Exit Help** on the bottom right of the Help screen to return to scanning ballots.

If multiple languages are available, Verity Scan will also display a **Language** button in the upper left. Selecting the language button will allow the voter to choose from a list of available languages in which to display any instructions or messages.

troubleshooting

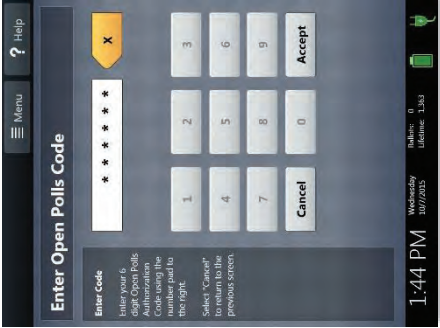
If there is a problem with the Verity Scan, follow the error instructions on the screen (if applicable), and/or contact your elections office for assistance.

5. Select **Open the Polls**. You can also print a Configuration report, Precincts Enabled report, or additional copies of the Zero report, if your jurisdiction requires them. ▶

IMPORTANT: Once you open polls, you can no longer print a Zero report.



6. Enter the Open Polls Code, and then select **Accept**. The Open Polls report will print. ▶



7. Wait while the Open Polls report prints. File the Zero and Open Polls reports according to local guidelines.

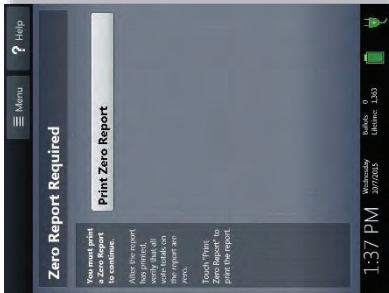
opening polls

You must open polls on the first day that voting will occur on that device. For instructions on reopening polls on the second or subsequent day of multiple-day voting events, see page 40.

1. Setup and power on the Verity Touch Writer. **Confirm that you are running on AC power** (see page 35).

2. Select **Print Zero Report**. ▶

NOTE: *If you are reopening polls during subsequent days of a multiple-day voting event, then you will not print a Zero report. See page 40.*



3. Wait while the Zero report prints (on the built-in report printer). Using the Zero report, check the following:

- Verify the ballot count total on the Zero report is ZERO and enter it in the Reconciliation Log.
- Verify that the polling place on the report is correct.

IMPORTANT: *If these items are incorrect, contact your elections office.*

4. Verify that the clock in the bottom left corner of the screen displays the correct time.

IMPORTANT: *If the clock is incorrect, contact your elections office.*

spoiling printed paper ballots

To spoil a printed paper ballot, follow your local procedures (for example, filling out a spoiled ballot log and envelope).

undervotes, overvotes, and blank ballots on Verity Scan

If scanning hand-marked paper ballots, and the voter has *overvoted* (marked more than the allowed number of choices in a contest), Verity Scan may prompt the voter to choose whether to:

- a) Remove their ballot and request a new ballot from the poll worker, *or*
- b) Cast their ballot as-is (overvoted contests will not be counted)

If the voter has left a ballot or contest blank, the voter may be prompted to choose whether to:

- a) Remove their ballot and make changes, *or*
- b) Cast their ballot as-is (blank contests will not be counted)

The voter prompts that appear on Verity Scan will vary depending on how the election was set up (determined by your jurisdiction). Follow the directions on the Verity Scan screen. In some jurisdictions, the voter will be prompted to contact a poll worker, and the poll worker must press the poll worker button to accept a ballot as-is.

provisional ballots

- **IMPORTANT: Verity Scan will not accept provisional ballots printed from Touch Writer. Preprinted ballots used for provisional voting should never be scanned at the polling place using Verity Scan.**
- Follow your local jurisdiction's guidelines for the issuing and handling of paper provisional ballots.
- Procedures vary from jurisdiction to jurisdiction; a typical procedure may require that provisional ballots be placed in a provisional ballot envelope, which is then placed in the emergency ballot bag (see page 20).

the emergency ballot bag and emergency ballot slot

A separate, secure bag for unscanned ballots is included inside the ballot box. It is accessible through an additional locking door located on the back of the Verity Scan ballot box. ▶



The emergency ballot slot on the top of the ballot box also feeds into this bag. This slot should remain sealed unless the Verity Scan device cannot accept ballots. ▶



multi-sheet ballots and Verity Scan

When issuing paper ballots with multiple sheets, voters must receive all sheets for each ballot. Voters should be instructed to scan all sheets of their ballot, even if they have made no choices on a particular sheet.

- The Verity Scan ballot counter will increment when a sheet 1 is scanned but not when a sheet 2 (or higher) is scanned. If sheet 2 of a 2-sheet ballot is scanned without a sheet 1, the ballot counter will not increment, but all votes on sheet 2 will be counted accurately.
- If the voter has not yet scanned any part of the ballot and the voter realizes that a sheet needs to be spoiled, it is generally considered best practice to spoil and replace all ballot sheets. While not necessary, this may assist in the location of all ballot sheets in the event of an audit or recount.
- If not all sheets can be spoiled (i.e. one sheet has already been scanned), spoil the remaining sheet(s) of the ballot, provide replacement sheet(s), and spoil the unused sheets from the replacement ballot.

report printer operation

1. The thermal report printer is located on the right-hand side of the Verity Touch Writer. ▶



2. To open the paper compartment: While standing in front of the device, pull the lever on the top of the printer cover towards you and lift up to open the paper compartment. ▶



3. To replace paper: Place the new paper roll into the printer as shown. Paper must roll up from the bottom. ▶



4. Close the printer cover. The paper must extend out from underneath the front edge of the cover. The white button can be used to advance the paper. ▶



poll worker button

The blue poll worker button is located on the back of Verity Touch Writer. This button is used for certain actions such as printing reports and issuing access codes. ▶



about Verity Access

Verity Access is intended for voters that cannot, or prefer not to, use the touchscreen. Verity Access includes two connection ports: the left connection port for headphones, and the right connection port for any dual-switch input device (such as tactile switches or sip-and-puff devices). With Verity Access, a voter can:

- Navigate through a ballot with the **Move** wheel
- Make selections on a ballot with the **Select** button
- Activate help text using the **Help** button

installing headphones and tactile switches

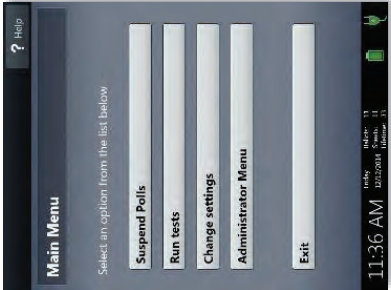
1. Lift the Verity Access from its cradle.
2. Plug the headphones into the headphone port on the top left of the Verity Access. ▶
3. Plug the tactile switches, sip-and-puff, or any other dual-switch input device into the port on the top right of the Verity Access. ▶



suspending polls

(Early Voting)

1. Press the *blue* poll worker button on the back of the Verity Scan.
2. Select **Suspend Polls**. ▶



3. Enter the Suspend Polls Code and select **Accept**.
A Suspend Polls report will print automatically. ▶



4. Polls are now suspended. Print and file reports available on the screen as required by your jurisdiction. Available reports may vary and are configured by the election officials in your jurisdiction. You may use the space below to document local requirements.

local reporting requirements

5. When you have finished printing reports, press the red power button on the back of the Verity Scan to power it off. ▶

IMPORTANT: Wait for the Verity Scan to be completely powered down and showing a black screen if you will be unlocking and removing the tablet. If stowing the tablet, make sure to lock it in with the key and pull the blue latch down to secure it in place.



6. Follow your local jurisdiction’s guidelines, including chain-of-custody procedures, when transferring equipment, vDrives, and/or ballots to your central counting location. If you are leaving equipment in place, be sure to properly secure all equipment, preferably behind a locked door. You may use the space below to document local transfer procedures.

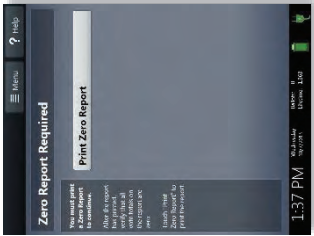
local procedures

Touch Writer orientation

screen orientation

When powered up for the first time the device is used during a voting event, the Verity Touch Writer should display the Print Zero Report screen. ▶

NOTE: If you are reopening polls during subsequent days of a multiple-day voting event, then you will not print a Zero report. See page 40.



In addition to the date and time, the following appears at the bottom of the screen:



- **Ballots:** The number of ballots printed using the Verity Touch Writer for the current election; at the start of a voting event, this number should be zero.
- **Lifetime:** The number of ballots printed using the Verity Touch Writer for the lifetime of the device (for all elections).
- **AC and battery power indicators:** A green battery icon indicates the battery is connected; a green plug icon indicates AC power is connected. Specific battery power level can be found on the Touch Writer Power-On Self Test report.

NOTE: If AC power is not available, the device will automatically switch over to battery power, and a warning message will display. To dismiss the message and continue operating on battery power, touch "If the power is out, touch here to use battery". If a voting session is in progress, this message will not appear until the session is completed.

When battery power is low, and AC power is disconnected, a warning message will appear on the device screen. Reconnect the device to AC power.

12. Press the *red* button on the back of the Verity Touch Writer to power it on. ▶

- During the power on process, a Power-On Self Test report will print on Touch Writer’s built-in report printer. This report will indicate any hardware or connection issues; if any issues are noted, check connections and power off the printer and the Touch Writer. Power the printer on first before powering on the Touch Writer.



13. *(if applicable)* If your jurisdiction uses the AutoBallot barcode reader: Wait until the Verity Touch Writer finishes powering up and displays the **Print Zero Report** screen, and then connect the AutoBallot barcode reader to the USB connection located on the vDrive compartment above the report printer. ▶



closing polls

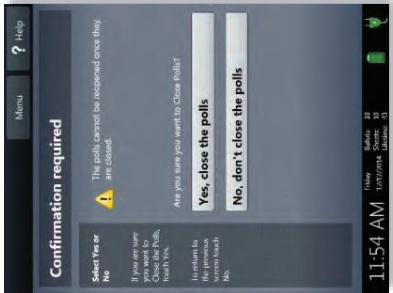
IMPORTANT: Wait until the close polls time to close polls. Once polls are closed they cannot be reopened on that Scan device.

- Press the *blue* poll worker button on the back of the Verity Scan.
- Select **Close Polls**. ▶



- Select **Yes, close the polls**. ▶

IMPORTANT: Once polls have been closed, they cannot be reopened on that Scan device.



4. Enter the Close Polls Code and select **Accept**. The Close Polls report will print automatically. ▶



5. The polls are now closed. Print and file reports available on the screen as required by your jurisdiction. The available reports may vary and are configured by the election officials in your jurisdiction. You may use the space below to document local requirements.

local reporting requirements

8. Seat the tablet in the cradle (A), tilt it back (B), and lock it in place (C). ▼



9. Verify the Verity Touch Writer device seals, per local procedure. Attach privacy screens to both sides of the booth. ▶



10. Plug the power cord into AC power. A green light should illuminate on the power brick when AC power is present. ▶



11. Press the switch on the bottom right side of the ballot printer to power it on.



5. Plug the flat end of the USB printer cable from the ballot printer into the back of the Verity Touch Writer, with the notch facing up. ▼



6. Open the Verity Touch Writer case and lock the lid brace in place. ▼

IMPORTANT: Never tilt a device up by the handle while cords are connected – this can damage the cord where it connects to the device, or cause damage to the device itself.



7. Unlock (A), unlatch (B), and remove the tablet (C). ▼



6. When you have finished printing reports, press the red power button on the back of the Verity Scan to power it off. ▲



IMPORTANT: Wait for the Verity Scan to be completely powered down and showing a black screen if you will be unlocking and removing the tablet. If stowing the tablet, make sure to lock it in with the key and pull the blue latch down to secure it in place.

NOTE: The Verity power cord has a locking connector. When inserting the connector into a Verity device, it will make a small "click." To disconnect the power cord, grasp the cord at the base of the black connector molding where it connects to the Verity device, and slide back the sleeve. This will unlock the connection so that the cord may be removed.

7. Follow your local jurisdiction's guidelines, including chain-of-custody procedures, when transferring equipment, vDrives, and/or ballots to your central counting location. If you are leaving equipment in place, be sure to properly secure all equipment, preferably behind a locked door. You may use the space below to document local transfer procedures.

local procedures

Verity Touch Writer

Verity Touch Writer is an accessible ballot marking device; any voter may use Touch Writer to make their ballot selections using either the touchscreen, or the Verity Access (described below). Once a voter has finished voting and reviewed their choices, they will then print a paper ballot, marked with their choices, from the attached printer. The voter then retrieves and casts the ballot, either using Verity Scan, or into a ballot box to be processed centrally.



Verity Access is an Audio-Tactile Interface (ATI) intended for voters that cannot, or prefer not to, use the touchscreen. Verity Access includes two connection ports: the left connection port for headphones, and the right connection port for any dual-switch input device (such as tactile switches or sip-and-puff devices).



vDrives are used to transfer digital ballot styles from the Verity election definition software to Verity Touch Writer, and to transfer device audit log data from Verity Touch Writer to Verity software (vote data is not stored on Verity Touch Writer). vDrives are inserted into a standard USB port located in a locked and sealed compartment; each Verity Touch Writer has its own vDrive.

NOTE: Software startup for each unit may take several minutes, due to security and data integrity checks that the Verity software performs. This process is included in the design of the Verity Voting System to verify the authenticity of the software before allowing it to operate.

setting up the Verity Touch Writer

1. Set the Verity Touch Writer on top of the booth, aligning footpads with the indentations (the handle on the front of the Touch Writer should face the same direction as the handle on the booth). ▶



2. Stand at the front of the booth. Reach under the front of the booth top and push the latch away from you to secure the Touch Writer to the booth. ▶



3. Follow local procedures to remove the tamper seal from the Touch Writer handle, if applicable. Unlock the case (if locked). Open the case and remove the power brick and power cord from the storage compartment. Close the compartment and case. ▶



4. Plug the power cord into the power brick, and then plug the power brick into the back of the Verity Touch Writer (flat side up). ▼

IMPORTANT: Do not plug the power cord into the wall yet.



3. Attach the rear leg assembly. Press the metal buttons to attach and lock it into place. ▶



4. Attach the front leg extensions. Press the metal buttons to attach each leg and lock them into place. ▶



5. Turn the booth over to set up the Verity Touch Writer. ▶



setting up Touch Writer

setting up the ballot printer

1. Set up the ballot printer table and set the ballot printer on the table.
2. Plug in the square end of the USB printer cable into the printer. (The flat end will be plugged into the Verity Touch Writer.) ▶
3. Insert the printer power cord into the printer and the other end into an outlet or UPS/battery backup. ▶



4. Load the ballot printer with appropriate ballot paper. Note that the paper size will vary by election, and that the printer tray used may vary depending on the types of printers and accessories used in your jurisdiction. Follow local procedures.

Loading ballot paper in the main tray (Tray 1)

- a) Pull out the tray 1 drawer on the printer. ▶



- b) Load paper in the tray. If necessary, push the blue tab and pull the paper guide to the appropriate setting (Letter/8.5"x11", or Legal/8.5"x14"). Paper sizes larger than 8.5"x14" require a tray extender (not available in all jurisdictions).

- c) The main tray extender kit for 17"/20" ballots includes two parts:
- The front piece installs into the MP Tray door, and is used to support the ballots as they exit the printer.
 - The rear piece replaces the stock paper stop and rear tray extension cover. Once installed, the extender can support 14", 17", and 20" paper; however, the stock paper stop must be reinserted to support 11" paper.
- d) Reinsert and close the paper tray. ▶



Loading ballot paper in the manual paper tray (MPT)

In some jurisdictions, the manual paper tray must be used for larger paper sizes; follow local procedures.

- a) Open the front Manual Paper Tray (MPT) and extend the tray as shown. ▶
- b) If applicable, place the optional tray extender in the tray. ▶
- c) Load ballot paper in the tray. Ensure the paper guides on the sides of the tray are set snug to the paper.



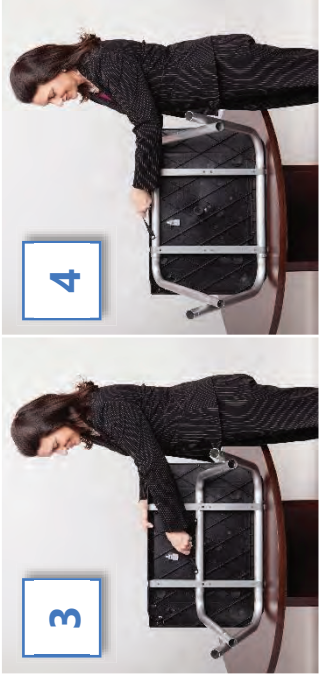
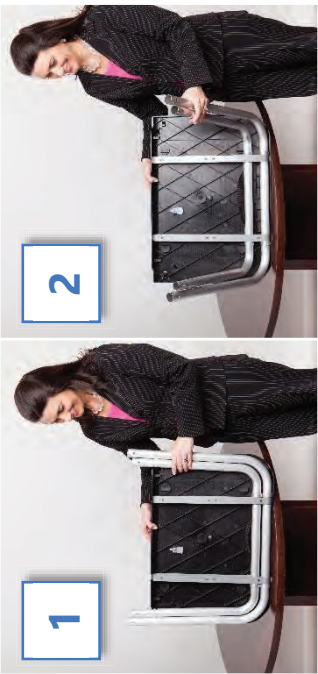
5. Do not power on the printer at this time.

setting up the voting booth

1. Remove booth parts from the transport bag. A complete set of booth parts includes the booth table, rear leg assembly, front leg extensions, and privacy screens. ▼



2. Release bungee cords holding the booth legs, if present. Unfold the legs from booth table. Pull on the handle and lift to lock the legs into place. ▶
3. 4.



Hart Ballot Production Services

About Hart Ballot Production Services

This document outlines the ballot ordering and proofing process for customers using Hart's Ballot Production Services and the Verity Voting system.

Hart Ballot Production Service customers will work with a Hart Ballot Production Specialist to submit blank vDrives, Keys and written ballot information forms to Hart. Then, using the federal, state, and local information, Hart creates the election and returns ballot proofs to the customer. After approval of the ballots, Hart creates audio files and sends them to the customer for proofing. Once the customer approves the audio files, Hart sends the customer all of the materials needed to run a live election.

Ballot ordering and proofing process

- 1** Approximately 2-3 weeks before the filing deadline for a scheduled election, customers using Hart Ballot Production Services will receive a packet of forms, including the following:
 - Verity Ballot Production Service Request Form
 - Verity Ballot Order Form (if applicable)
 - Verity Grid Sheet Form
 - Verity vDrive Planning Worksheet
- 2** Election officials will fill out the Verity ballot information forms they receive and return them to Hart Ballot Production Services.
- 3** The election officials will decide how many vDrives they will need for the election. Election officials will use the *vDrive Planning Worksheet* to plan the number of vDrives needed for an election, then return the completed worksheet to Hart Ballot Production Services.
- 4** The election officials send the actual vDrives and Keys (quantity determined in step 3) to Hart for programming. The USB drive sent for the previous election (containing the Finalized Verity Build election) should also be returned at this time.
- 5** Using the data provided by the customer, a Hart Ballot Production Specialist will create the election. Hart will email PDF previews of the ballots so the elections officials can proofread the ballot content and layout. In addition, Hart will send the following reports, to be used for proofing ballot content for accuracy and spelling:
 - **Billing and shipping confirmation.**
 - **Ballot proofs** (copy of each ballot format/style).
 - **Polling Place List** – This report list all of the polling locations and their associated precincts and districts by name. It also designates the voting type (Early Voting, Vote Centers, Election Day, etc.) associated with each polling place.

- **All Contests report** – A report of all contests in the election, including all contest options/candidates for each contest, and party associations.
- **Contest Associations report** – This report lists every contest on the ballot and the precincts associated with them, as well as district associations. It can be useful for assigning the appropriate precincts to your Verity voting devices during the predefinition process. You can find instructions for predefining Verity voting devices in the Verity Support Procedures Guide.
- **Proof Letter** (customer approval of ballot content and permission to proceed).
- **Audio Proof Letter** (customer approval of ballot audio and permission to proceed).
- A **Ballot Production Plan**, listing the number of ballots to print by precinct (if applicable).

6 Election officials will submit any corrections needed to their ballot proofs. If needed, a Hart Ballot Production Specialist makes any necessary corrections and repeats step five.

7 Election officials approve the ballot and return the signed Proof Letter.

8 The Hart Ballot Production Specialist will create the audio files and send to the customer.

***NOTE:** Typically, the audio production process takes 2-3 business days.*

9 Election officials review and approve the audio files, returning the signed Audio Proof Letter.

10 Hart Ballot Production Specialist ships the **Verity Election Materials Package** to the customer (see page 3 for details).

11 If the customer has ordered printed ballots, ballots will be shipped to the requested location.

***NOTE:** Ballot production typically takes between 5-7 business days from the time of final approval.*

A note about ballot printing in Verity Build

For jurisdictions using unique identifiers and/or ballot numbering on your printed ballots: If your jurisdiction orders printed ballots from Hart, and you also intend to print ballots from your own Build workstation, you must coordinate your additional printing with Hart Ballot Production services to avoid the possibility of duplicate unique identifiers and/or ballot numbers on your printed ballots. For more information, please contact your Hart Ballot Production Specialist.

The Verity Election Materials Package

Once Hart Ballot Production Services receives written approval from the customer for a ballot, they will prepare and ship an Election Materials Package to the customer. This set of materials will include the following:

- **vDrives** – contain ballot information and audio for Verity voting devices.
 - **Test vDrives** – for Logic and Accuracy testing (LAT) and training.
 - **Official vDrives** – for live voting events.
- **Verity Keys** – used to perform critical actions using Verity devices and software.
- **Finalized Verity Build election** – on USB; contains the database used to run the election in Verity Central and/or Verity Count.

Hart will send you a new USB drive with your vDrives every election.

- **Reports** – the following final reports are included; these can be used to verify that any requested changes were made:
 - **Jurisdiction Configuration report** – This report provides jurisdictional details, including lists of precinct names, district names, and precinct/district associations.
 - **Polling Place List** – This report list all of the polling locations and their associated precincts and districts by name. It also designates the voting type (Early Voting, Vote Centers, Election Day, etc.) associated with each polling place.
 - **All Contests report** – A report of all contests in the election, including all contest options/candidates for each contest, and party associations.
 - **Contest Associations report** – This report lists every contest on the ballot and the precincts and districts associated with them. It can be useful for assigning the appropriate precincts to your Verity voting devices during the predefinition process. You can find instructions for predefining Verity voting devices in the *Verity Support Procedures Guide*.
 - **vDrives Created report** – This report summarizes the quantity, type and ID numbers of vDrives and Keys associated with your election.
 - **Ballots Printed report (if applicable)** – This report provides a detailed list of all ballot print jobs that have been created.
- **Standard Test Deck** - The standard test deck contains Test ballots that have one vote for every option, one blank ballot, and one overvote. This test deck may be used for Logic and Accuracy Testing (see note below), and for general testing purposes with Verity voting devices and software.

NOTE: *The test deck prepared by Hart Ballot Production Services may not be sufficient for all jurisdictions. You can find Hart-recommended Logic and Accuracy Test procedures in the Verity Administrator's Guide; however, it is the responsibility of the jurisdiction to create a Logic and Accuracy test deck, and perform Logic and Accuracy Testing, that meets the election law and code requirements of their state or other governing body.*

Using Images and Rich Text with Verity Ballots

Introduction

Verity Layout and Verity Data provide the capability to use images and rich text to fulfill jurisdictional ballot requirements as well as enhance the ballot aesthetics. Images and rich text may be included in the ballot in two ways:

- Manually uploading images and typing rich text, using the appropriate menus within the **Edit Data** tab.
- Importing images and rich text via the **Import** menu

This document will discuss both methods, as well as provide some basic recommended guidelines for including images and rich text in your ballot.

Overview: using images in ballots

Using images is an easy way to include complex formatting and fonts that cannot otherwise be duplicated using basic text formatting. However, excessive use of images will increase the size of your ballot files and may result in longer processing times when you export ballots to PDF.

General recommendations

- Avoid using an image for your entire ballot instruction or proposition text. Verity has flexible instruction creation features that allow for a mix of images with real text.
- When creating images, use the minimum resolution and bit depth necessary to achieve acceptable quality. Recommended image specifications are:
 - **Resolution:** no more than 300 dpi
 - **Bit Depth:** no more than 16 bit for color/grayscale, 8 bit for monochrome images
- Convert color images to grayscale, if color images are not needed

Image dimensions

Image dimensions on the final ballot are determined differently for different elements:

- **Parties** (the party image appears in different locations, depending on the election type):
 - In the ballot header (*closed primary elections*): Verity automatically resizes the image to fit the available area, according to the ballot template chosen.
 - In Party Selector contests (*straight party voting*): The original size determines the display size (e.g., a 1"x1" image will appear 1"x1" on the ballot). If the image size exceeds the available space in the image area or column, the image will be cut off.
- **Contest Titles:** The original size determines the display size (e.g., a 1"x1" image will appear 1"x1" on the ballot). If the image size exceeds the available space in the image area or column, the image will be cut off.

- **Ballot Instructions:** Verity automatically resizes the image to fit the available area, according to the ballot template chosen.
- **Additional Text:** The original size determines the display size (e.g., a 1"x1" image will appear 1"x1" on the ballot). If the image size exceeds the available space in the image area or column, the image will be cut off.
- **Ballot Header:** Verity automatically resizes the image to fit the available area, according to the ballot template chosen.
- **Ballot Stub:** Verity automatically resizes the image to fit the available area, according to the ballot template chosen.

NOTE: pixel widths of the available image areas and columns on a ballot depend on the ballot template chosen; for assistance with choosing or editing ballot templates, contact Hart Support.

Manually uploading images and typing rich text

Verity supports manual uploading of images via the appropriate menus under the **Edit Data** tab in Verity Layout and Verity Data. You may upload images in the following menus:

- Parties
- Contest Titles
- Ballot Instructions (*paper ballots*)
- Additional Text
- Ballot Header
- Ballot Stub

You can find instructions for uploading images for each of these types of ballot elements in the *Administrator's Guides* for Verity Layout and Verity Data.

Adding images in ballot instructions

In the **Ballot Instructions** menu, you may create multiple ballot instruction elements, and alternate instruction images with instruction text. You can set the order of these elements as well.

Typing rich text for ballot instructions and propositions

You can manually enter ballot instructions and proposition text in the Verity application, using the **Ballot Instructions** and **Contest Titles** menus, respectively. When manually typing text for ballot instructions and proposition text, you may use the built-in rich text options (bold, underline, italics, etc.) to format your text. If you have additional formatting needs, or if you want to include images within proposition text, you can use the Import functionality.

Importing images and rich text

In addition to the manual upload method described above, for certain elements, you may also directly import images and rich text via the **Import** menu.

You can include **images** in the following import files:

- Parties
- Contest Titles
- Ballot Instructions (*paper ballots*)
- Additional Text

You can include **rich text files** in the following import files:

- Contest Titles (*for proposition text*)
- Ballot Instructions (*paper ballots*)

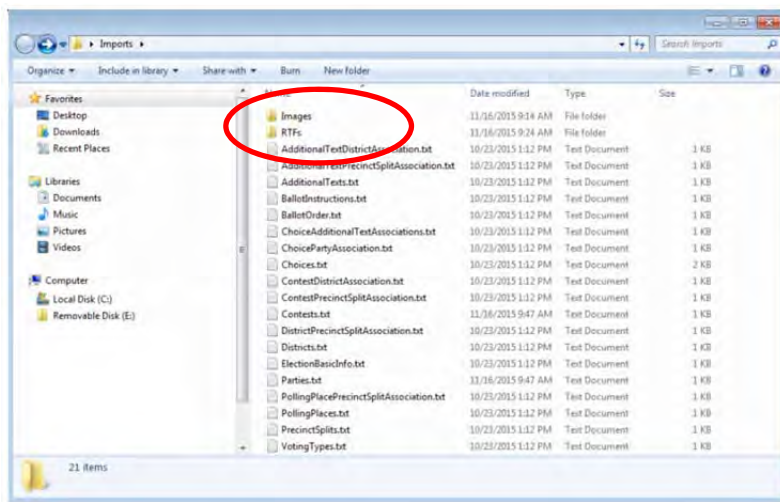
IMPORTANT: When importing rich text files, the RTF files must only contain the Segoe UI typeface.

How to import images and rich text

- 1 Gather/create image(s) and rich text file(s) on a non-Verity workstation.
 - Image files must be one of the following formats: *.jpg, *.gif, *.png, *.bmp
 - Rich text files must have the file extension *.rtf (e.g. *BallotInstructions.rtf*)
- 2 On the same non-Verity workstation, create the appropriate import file(s) - these files must have the file extension *.txt. Instructions and specifications for creating importable *.txt files can be found in the *Administrator's Guide*.
- 3 In the appropriate field(s) of the import file, enter the file name (with file extension) for the image or rich text file you would like to import.

```
1,"Republican Party","Republican","REP",False,"RepublicanLogoGray.jpg",,1
2,"Democratic Party","Democrat","DEM",False,"DemocraticLogoGray.jpg",,2
3,"Libertarian Party","Libertarian","LIB",False,"LibertarianLogoGray.jpg",,3
4,"Green Party","Green","GRN",False,"GreenLogoGray.jpg",,4
```

- 4 In the root folder (called "Imports" in the example shown) containing your import file(s), create two subfolders:
 - Images
 - RTFs



- 5 Copy image files into the **Images** folder; copy rich text files into the **RTFs** folder.
- 6 Copy the entire root folder, containing the import file (*.txt) and the **Images** and **RTFs** folders onto a removable USB drive.
- 7 Insert the USB drive into your Verity Layout or Verity Data workstation and follow the steps outlined in the *Administrator's Guide* to import the files.

Including images within rich text files

In addition to importing images and rich text files separately, you may also paste images for ballot instructions and proposition text *within* the rich text files themselves. If you paste an image into a rich text file, you do NOT need to import the image file itself. Certain elements (bullets, additional fonts, some symbols) cannot be formatted as real text within a rich text file, and must be included as images.

Importing data: general recommendations

Whenever you import any data, Verity will give you the option to **Append** to or **Replace** the data currently in the election. Append will *add* the imported data to the existing data, while Replace will *overwrite* the existing data. In most cases, you will want to replace data to avoid duplicating existing items. However, using the import feature to replace data for a single item (e.g., Parties) will cause you to lose any associations/affiliations related to that item that you have already made. Therefore, it is recommended that you import data files *in the order that they appear in the application* (top to bottom). Start with election data (voting types, parties, etc.), then jurisdiction data (precincts, districts, polling places, and their associations), then contest data (contests, choices, contest and choice associations, etc.), then ballot data (instructions, additional text, ballot order, etc.). Alternatively, you can export an *entire* data set ("Full Election Dataset"), make the desired changes to each file on a non-Verity workstation (including adding images, rich text, etc.), then import the full dataset at once.

Risk Limiting Audits: Recommended Procedures for Verity Voting

Introduction

From the outset, Verity Voting was designed and architected to support risk limiting audits (RLAs). Verity Voting does support risk limiting audits, by allowing users to easily compare human interpretations of individual ballots with machine interpretations of those same ballots, to assess the risk of whether the outcomes are wrong.

What is a risk limiting audit?

A risk-limiting audit is a method to ensure that at the end of the canvass, the hardware, software, and procedures used to tally votes found the real winners. Risk-limiting audits do not guarantee that the electoral outcome is right, but they have a large chance of correcting the outcome if it is wrong. They involve manually examining portions of an audit trail of (generally paper) records that voters had the opportunity to verify recorded their selections accurately.

- Mark Lindeman & Philip B. Stark, *A Gentle Introduction to Risk-Limiting Audits*

Implementing risk-limiting audits

Working assumptions

Hart InterCivic designed Verity Voting to support risk-limiting audits according to the following foundational assumptions, which are consistent with best practices and numerous scholarly articles on RLAs:

- **Risk limiting audits are highly adaptable**, and there are multiple methods to implement risk-limiting audits; methods of implementation are not (and should not) be exclusive.
- **Any jurisdiction can conduct a risk limiting audit**, provided that the following preconditions are met:
 - 1 There is a durable, voter-verified audit trail of the voter's selections (such as a physical paper ballot, for example).
 - 2 The audit trail has been preserved inviolate, through appropriate chain of custody procedures.
 - 3 The subtotals used in the audit are the same subtotals reported by the voting system (i.e. the hand tabulation of the totals from the audit should add up to the subtotals reported by the voting system).
 - 4 There must be explicit standards and guidance for determining voter intent, and for determining what constitutes a valid vote.
- **Tradeoffs are a natural outcome of the fact that there are diverse methods to conduct RLAs.** Given the fact that risk limiting audits are highly adaptable, they come in several varieties, with various benefits and requirements. Accordingly, the methods to implement RLAs must be weighed against other competing values, such as voter privacy.
- Hart InterCivic believes that displaying a machine interpretation of voter selections should be done in a manner that protects voter privacy. Accordingly, the Verity Voting system was designed to support an election administrator's ability to trace from machine interpretations of voter marks back to specific physical ballots, while also randomizing the manner in which ballots are ultimately recorded in flash memory. In this way, even if jurisdictions administering the election do not employ appropriate procedures to prevent reconstruction of the sequence in which ballots were cast, privacy is protected.
- **In sum, the Verity Voting system supports ballot-level risk limiting audits while simultaneously protecting voter privacy.**

Verity Central support of RLAs

Verity Central supports ballot level audits by meeting the following requirements:

- Ballot level audits require knowing the number of ballots in each batch – *Verity Central's Ballot Summary Report provides this information.*
- Ballot level audits require a method to locate each batch – *When using Verity Voting, as each batch is scanned, affixing the Ballot Summary Report to the physical batch allows users to locate each batch.*
- Ballot level audits require a manifest or "map" that allows users to identify each ballot within each batch uniquely – *The scan order for any ballot that appears in Verity Central's "Ballot Review" window traces to the Ballot Summary Report, which, combined with the Batch ID, allows users to trace each ballot record back to a unique physical ballot.*
- Ballot level audits require a method of displaying the machine interpretation of marks on individual ballots – *Verity Central allows users to export plain-language, annotated ballot records that display this information (i.e. target areas that are "marked" or "not marked"), with corresponding batch ID and scan order information.*

Steps to perform an RLA with Verity Central

- 1 Identify the ballots that you wish to review.
- 2 Apply filters in Verity Central to see the ballot records that correspond to the class of ballots you wish to review.

Note: Assuming the audit is being conducted post-election, batches that have been written to vDrive flash memory will be identified in the "Review Images" window with a locked "v" icon, indicating that the records are recorded and cannot be changed. Because the ballots have been recorded, the process of filtering on specific ballots, reviewing the graphic annotated records, and tracing those back to the physical ballot will result in a human-readable review of the CVRs that were written to the vDrive.

- 3 Double-click on the specific ballot for review. This will produce the "Ballot Review" window, where the ballot is represented with annotations (i.e. a record of the machine interpretation of the marks; see Actions>>Show Annotations).
- 4 For each ballot, print or export a copy of the annotated ballot record that shows the machine interpretation of the marks; the annotated ballot record includes overlays of the target areas that the machine and ballot adjudication counted as marks.
- 5 Each digital ballot record corresponds to a batch ID and a scan order within the batch. (If exporting the records, this information is indicated in the export filename.) You may also use the batch report to identify the physical location of the original ballot and use the scan order to trace back to the physical ballot within the batch.
- 6 Perform a human interpretation of the same ballot, and compare it to the annotated record from Verity Central that you printed or exported in Step 4, above.
- 7 When the vote shares in the sample give sufficiently strong evidence that the reported winner really won, the audit stops.

OPTIONAL ADDITIONAL STEPS – After vDrives from Verity Central are read into Verity Count

- 8 As an additional check, users can verify that the number of ballots counted in the selected group/batch from Verity Central matches the number of ballots tabulated in Verity Count, for that same sample.

- Use the same filters in Verity Count custom reports, or in the Auditing Dashboard, to compare the number of ballots counted.
- 9** As yet another check, users can compare the tabulated subset of totals of Verity Count CVRs from that specific sample against the hand tabulation based on the annotated records from Verity Central (i.e. the human interpretation of the individual ballots).
- In Verity Count, apply the same filters used for the Verity Central sample to produce custom reports that will show subtotals for that same sample.
- 10** Finally, the user can hand tabulate the Cast Vote Record exports from Verity Count and compare those results to the hand tabulation from the Verity Central annotated records.
- In Verity Count, apply the same filters used for the Verity Central sample and print cast vote records (e.g., hand count a random batch from Central and then hand count that same batch from the Count CVR export).

Note: You may also use a process similar to Step 10 to compare Count CVR exports to ballots from Verity Scan devices. In Verity Count, you may compare the CVR export by vDrive (or polling place, or precinct, etc.) to a hand count of paper ballots associated with the same Scan device.

Verity Security Features

About this Document

Verity system security was designed following the most current best practices in voting and computer technology. In addition, Verity has been thoroughly tested by a voting system test laboratory (VSTL) accredited by the U.S. Election Assistance Commission (EAC), to ensure proper security and software functionality. The Verity system provides security in depth, with multiple, overlapping levels of physical and digital security features combined with comprehensive auditing capabilities. This document explains several of the most important security features of the Verity system, including:

- Device Physical Access Controls
- Kiosk Mode
- Device Secure Boot Process
- Whitelisting
- Tamper Evidence
- User Authentication
- Audit Logging
- Vote Security

Device Physical Access Controls

Non-standard physical connections are used for external ports on Verity devices, including the USB ports used for Verity Touch Writer printers, and the Verity Controller & Touch DRE booth connection cables. The use of non-standard port connections prevents unauthorized users from inserting any standard or commercial off-the-shelf cables or devices. In addition, the physical ports use non-standard wiring, which prevents any non-Verity device from being recognized.

As an added security measure, integral sliding port covers are included that may be secured with tamper-evident seals by the jurisdiction when the ports are not in use. Tamper-evident seals may also be fastened to the Verity device handles, and on locations that store ballots or vote data (for example, the vDrive compartments on Verity Scan or Controller and the external doors on the Verity Ballot Box). In addition, keyed locks are used to prevent unauthorized access to the vDrive compartment, ballot box, and device cases.

Kiosk Mode

All Verity workstations and voting devices operate in what is known as kiosk mode. In kiosk mode, users can only work in the Verity voting applications, thus preventing access to the desktop or operating system of the computer or device. This prevents introducing unauthorized applications to the computer, prevents malicious changes to the operating system itself, and enhances overall system security. Because of this enhanced security, all tasks that involve transfer of data to or from an external source (importing data, exporting data, saving archives, etc.) must be completed using external USB data storage devices.

Device Secure Boot Process

Software startup for each Verity voting device may take several minutes, due to security and data integrity checks performed by the Verity software. This process is included in the design of the Verity voting system to verify the authenticity of the software before allowing it to operate on the device, and is known as a secure boot process. The secure boot process includes write-protection technologies to prevent the installation of viruses and malware, and employs integrity checks on all software applications before they are allowed to run. These integrity checks validate that the software is in fact the trusted, authorized program (and not a malicious program with the same name).

Whitelisting

Whitelisting is the practice of limiting the applications that are permitted to run on a system. If a particular application attempts to execute on a system that uses whitelisting, the system checks the application against a list of permitted applications (the 'whitelist'). If the application is not on the list, the system prevents it from running. Verity workstations and devices use a whitelisting process to block all unauthorized applications from running on the system.

Whitelisting is the opposite of **blacklisting**, which is the method used by many antivirus programs. In blacklisting, certain applications that appear on a list (the 'blacklist') are blocked, while any that do not appear on the blacklist are allowed to run. The blacklist must be constantly updated as new threats emerge, and often cannot provide protection until after the system may already be infected. The disadvantage of blacklisting is that it is 'reactive' (responding only to viruses, applications, and malware that are already known to be a threat), while whitelisting is proactive (responding to *any* new threat that may occur, and eliminating the need to constantly update the list of malicious applications that must be blocked). Whitelisting allows the Verity system to protect itself both against the threats that exist today, as well as those that may exist in the future, without the need for the computer to be updated via the internet or any other means.

Tamper Evidence

All Verity software on Verity workstations and voting devices is tamper evident; any attempts to alter the function of the software would be evident when tested. Testing may be performed at any time, using built-in functionality that allows the user to export the **Hash Values** of the installed software on both Verity workstations and voting devices. A Hash Value is the digital 'fingerprint' of a software application; Hash Values can be externally compared to the trusted software build on file with the Election Assistance Commission (EAC), to ensure that the installed software is identical to the software certified by the EAC. For more information on **Hash Testing**, see the Verity Knowledge Base article *Hash Testing for Verity Software and Devices*.

In addition to the tamper-evidence of the software itself, Verity digitally signs certain data (e.g. election definition files, vDrives, etc.) to provide tamper evidence while maintaining transparency.

User Authentication

Verity applications are designed to ensure that they are accessible only by authorized users. Authorized users, in turn, are required to identify themselves using a login name and password prior to gaining system access.

Authorization

Role-based permissions determine the operations that each user can perform. Only users with the proper privileges can view or change data. Administrators assign a **user role** to each user, ensuring that each user has access only to the abilities and information authorized by the administrator.

Passwords and Authentication

In addition to an assigned user role, each Verity user also has a unique login name and password. Verity password management rules are modern and flexible. When each user logs in, Verity ensures that the user name and password are valid before the user can access the software. An administrator can configure user accounts for Verity in each jurisdiction. Hart recommends that all jurisdictions follow standard security best practices in regards to password complexity and the storage of user credentials.

Verity Key

Verity Key is a small security device that election staff program for each election. An authorized user must write a Verity Key for *each* new election, making the Key specific to that election. User passwords for Verity Key may be election-specific and user-specific.

Verity Key is part of the Verity Voting **two-factor authentication** process. Two-factor authentication requires that each user have something (a programmed Verity Key, inserted into the workstation or device) and know something (a relevant passcode associated with the Key). Verity must authenticate both the user passcode and the Verity Key together. Each Verity Voting application requires the Key before allowing certain operations to occur. Critical operations within the Verity Voting system require the user to insert the Verity Key and enter the passcode. Only when the Verity system authenticates the Verity Key and password will it allow the operation to continue.

Audit Logging

Verity records comprehensive logs for all activity performed in the Verity Voting system, as it occurs. Each Verity component (application or device) maintains its own log. Logs are a critical part of maintaining security by providing an audit trail. Logs are created uniformly across applications and voting devices.

Each Verity component writes two logs:

- **Audit log:** Contains election-specific logging events, such as any changes to an election and any exceptions or errors encountered in the application.
- **System log:** Contains events pertaining to system actions such as logins, password changes, etc.

Reading Audit and System Logs

Verity Audit and System logs use plain language, and are designed to be clear and easy-to-read. Audit logs allow the auditor to clearly see a list of events, the time the events occurred, and the user logged in when the event occurred. Log data includes the following information:

- The Verity application name and full version number (in header)
- The election ID (in header)
- Information for each event:
 - The date and time when the event occurred
 - The voting device serial number or workstation ID
 - The user logged in at time of event
 - The event name (in plain text)
 - The event details (in plain text)

Users may export application Audit Logs and System at any time, for the desired date/time range, from the appropriate workstation. Users may filter and export Device Audit Logs from Verity Count. Users can export logs as comma-separated values (CSV) to allow for external data searching and additional filtering.

Vote Security

The ballot choices of each voter are stored in the Verity System as Cast Vote Records (CVRs). To protect voter privacy, CVRs are not stored in any discernable order. In addition, CVRs do not contain voter information connecting a ballot (or CVR) to a specific voter. The use of digital signatures makes CVRs tamper-evident. CVRs are stored in multiple locations for security and auditability, risk mitigation, and disaster recovery. Users can filter and export CVR data for external auditing purposes using the Verity Count Auditing Dashboard. CVR data may be filtered by any one or a combination of several criteria, including location (polling place, precinct, or district), voting equipment type, voting type, and ballot content (contest or choice).

Verity Password Management

The Verity voting system requires the use of passwords and passcodes to ensure security throughout the election definition, voting, ballot processing, and tabulation processes. Verity password management falls into three categories:

User passwords (Verity workstations)

Username and passwords for Verity software workstations (Build, Central or Count) are created and managed in the **Users** application.

The Users application allows an administrator-level user to add users, define user roles for each installed application, disable or remove users, and manage rules that apply to all users. Administrators can manage all user passwords, but other users can only update their own passwords.

IMPORTANT: DO NOT LOSE THE ADMINISTRATOR USERNAME OR PASSWORD. If the Verity Workstation Administrator username and/or password is lost or forgotten, it cannot be retrieved. It is critical to log all passwords securely to prevent this from happening. In the event that the Administrator user name or password is lost, the workstation must be reimaged by Hart personnel (either on-site, or shipped for repair), and **ALL ELECTION DATA ON THAT WORKSTATION MAY BE LOST.**

Verity voting device passcodes

Voting device passcodes are set in Verity Build for administrators, maintenance and warehouse personnel, and poll workers. These passcodes allow you to manage your staff's ability to access different menus and functions on the voting devices themselves (Touch, Touch Writer, Scan, etc.).

- Poll worker passcodes give poll workers access to create access codes, print reports, and perform certain other actions related to the voting process.
- Maintenance passcodes give warehouse personnel and technical support personnel access to predefine and calibrate devices, and change certain device settings.
- Administrator passcodes allow administrators to certain device settings, such as changing ballot rules.

In addition, you will create additional device passcodes for opening, suspending, and closing polls for each voting type in the election.

IMPORTANT: If device passwords are lost or forgotten, they can be retrieved by an Administrator using the Build application. For customers using Hart Ballot Production Services (BPS), Election Officials can call BPS to retrieve a lost device password.

Verity device pass code access requirements

The table below lists each device menu or action requiring a pass code, and the pass code(s) required.

MENUS/ACTIONS	CODE(S) REQUIRED
CHANGE SETTINGS MENU	
<i>Set Clock</i> <i>Touchscreen Calibration</i> <i>Set Alert Volume (Verity Scan only)</i> <i>Scanner Contrast Calibration (Verity Scan only)</i> <i>Scanner Speed Calibration (Verity Scan only)</i>	Maintenance Code
POLL WORKER TASKS MENU	
<i>Create Ballot Access Code</i> <i>Deactivate an Access Code</i> <i>Spoil Current Ballot</i> <i>Print Access Code Summary</i>	Poll Worker Code
ADMINISTRATOR MENU	
<i>Change Ballot Rules (Verity Scan Only)</i> <i>Enable Recount Mode* (Verity Scan Only)</i> <i>Change Report Settings* (Verity Scan Only)</i> <i>Create Recovery vDrive</i>	Administrator Code
OTHER ACTIONS	
<i>Load Election (upon inserting a vDrive for a new election)</i>	Maintenance Code; Verity Key Device Password
<i>Open Polls</i>	Open Polls Code
<i>Suspend Polls (Verity Touch Writer)</i>	Poll Worker Code; Suspend Polls Code
<i>Suspend Polls (Verity Scan)</i>	Suspend Polls Code
<i>Close Polls (Verity Touch Writer)</i>	Poll Worker Code; Close Polls Code
<i>Close Polls (Verity Scan)</i>	Close Polls Code

**if available in your jurisdiction*

Verity Key passcodes

Finally, there are passcodes associated with Verity Key. These include an administrator passcode for the Key itself, and device and application passcodes. Passcodes for Verity Key are created and managed in Verity Build.

- The Verity Key administrator passcode is required to write the new key for each election. It cannot be recovered if forgotten.
- Device and application passcodes are used (in conjunction with the physical Key itself) to authorize certain actions, such as predefining devices and importing signed elections from the Build workstation. If device or application passcodes are lost or forgotten, they can be retrieved by an administrator using the Build application. For customers using Hart's Ballot Production Services (BPS), Election Officials can call BPS to retrieve a lost device password.
- A complete list of actions requiring the use of the Verity Key is found in the *Verity Administrator's Guide* (6641 series).

IMPORTANT: If the Verity Key administrator password is lost or forgotten, it cannot be retrieved, and the Key cannot be re-written. The Key must be discarded and replaced with a new Key with a known administrator password.

Conclusion

It is important to manage these passwords and passcodes carefully to ensure that authorized personnel know the required information when needed. Store all passcodes in a secure location and limit access to them.

It is important to note that device passcodes can be unique, or they can be shared across functions. For example, you can use the same passcode for opening polls across all voting types, or you can create a unique passcode for each voting type. You can create a new set of passcodes for each election, if desired, or reuse the same passcodes more than once. Remember that creating unique codes increases security, but also requires more careful management.



VERITY

MASTER AGREEMENT

This Master Agreement ("**Agreement**"), entered into effective as of _____, 201__ ("the **Effective Date**") by and between Hart InterCivic, Inc., a Texas corporation ("**Hart**") and the Customer set forth below ("**Customer**"), sets forth the terms and conditions pursuant to which Customer may procure from Hart certain hardware ("**Hardware**"), software ("**Software**") licenses and support services ("**Software Support Services**"), warranty services ("**Warranty Services**"), and/or design, engineering, software development, project management, operational training, election event support, and/or other services ("**Professional Services**"), from time to time. Hardware and Software may be referred to as "**Products**" and Warranty Services, Software Support Services and/or Professional Services may be referred to as "**Services**." Products may be "**Hart Hardware**," and "**Hart Proprietary Software**," (i.e. "**Hart Products**") or "**Third Party Hardware**" and "**Sublicensed Software**" (i.e. "**Third Party Products**"). The foregoing may be referred to together as the "**Verity system**."

Hart agrees to sell or provide to Customer Products and Services according to this Agreement, which includes all Schedules, Attachments and Exhibits. Customer agrees to all terms and conditions of this Agreement. Pricing and other material terms of Customer's initial commitment are as set forth in the Schedule A or Customer Signed Quote attached hereto as **Exhibit A**. This Agreement and Hart's quotations issued hereunder together comprise the complete and exclusive Agreement for the sale of the Products and the provision of the Services. No other terms and conditions sent by Customer shall apply, including any terms or conditions contained in any purchase order, request for quote (RFQ), request for proposal (RFP), communication or other operational form that is in addition to or different than the terms and conditions of this Agreement. Any of Customer's terms and conditions that are different from or in addition to those contained herein are hereby objected to and shall be of no effect unless specifically agreed to in writing by an officer of Hart. Customer acknowledges it has read and understands this Agreement (including all Schedules, Attachments and Exhibits) and is entering into this Agreement only on the basis of the terms set forth in this Agreement (including all Schedules, Attachments and Exhibits).

Agreed and Accepted:

Customer

Jurisdiction: _____

Name: _____

Address: _____

Phone: _____

Facsimile: _____

E-mail: _____

Executed By: _____

Name: _____

Title: _____

Hart

Hart InterCivic, Inc.

15500 Wells Port Drive

Austin, Texas 78728

Attn.: Phillip W. Braithwaite, CEO

800-223-4278

800-831-1485

pbraithwaite@hartic.com

Phillip W. Braithwaite

CEO

This Agreement is not effective until executed by both parties.

Each person signing this Agreement represents and warrants that he or she is duly authorized and has legal capacity to execute and deliver this Agreement.

1. ORDERING

Customer may request quotations for Products or Services from time to time. The existence of this Agreement does not obligate Customer to request a quotation or purchase any Products or Services from Hart. Any Customer request for quotation must include the following information: (i) description of requested Product or Services; (ii) unit quantity and/or desired term; (iii) Hart's part number and/or vendor part number, if applicable; (iv) current unit price as provided by Hart, if applicable; (v) correct shipping address, if applicable; and (vi) any other order information required by Hart. Each request for quotation shall identify the address of the shipping destination, if applicable. Customer may only make a request for quotation via facsimile and other Hart approved electronic ordering methods, including email. All quotations are valid for only 30 days unless specifically stated on the front of the quotation. If the quotation is signed by Customer within thirty (30) days, Hart will provide notice of its acceptance via countersignature within fifteen (15) days of the date on which it receives Customer's signature on the Hart quotation. Failure to provide such written acceptance shall be deemed Hart's rejection of the order. Hart reserves the right to accept or reject any order initiated by Customer in Hart's discretion. Only signed quotations will obligate the parties to the terms of such quotations and this Agreement with respect to the applicable Products and/or Services. Each accepted quotation shall be subject to the terms and conditions of this Agreement.

2. PRICING

- 2.1. **Products.** Prices for Products shall be specified by Hart in the relevant quotation or proposal and are subject to change without notice, including Prices for backordered Products, however, Prices in quotations or other agreements signed by both Parties are not subject to change. All prices are exclusive of shipping and packing costs, and insurance.
- 2.2. **Annual License and Support Fee.** The "Annual Fee" is the combined fee for licensing (in the case of Hart Proprietary Software), sublicensing (in the case of Sublicensed Software, if any), and support (a "License and Support Subscription"). Pricing for the initial Annual Fee is the amount specified as the "Initial Annual Fee" on **Exhibit A**. Pricing for subsequently ordered License and Support Subscriptions shall be specified on the applicable quotation, and unless otherwise specified, shall be pro-rated so as to be co-terminus with the initially-ordered License and Support Subscriptions. Hart may adjust the amount of the Annual Fee for renewal License and Support Subscription terms by notifying Customer of any price changes with the invoice in which the adjustment is made. Unless adjusted by Hart, each renewal Annual Fee will be the same as the Annual Fee for the renewing License and Support Subscription.
- 2.3. **Other Services.** Pricing for other Services shall be set forth in the applicable quotation, or if not specified, at Hart's then-current hourly rates.
- 2.4. **Additional Charges.** Additional charges may apply to Services e.g., travel, communication and other expenses. There will be an additional charge at Hart's current technician's rate per hour for any technical work required as a result of other than Hart-recommended equipment purchased by the Customer for use with the Products. Any other additional charges must be mutually agreed to by Hart and Customer and documented in an amendment to this Agreement.
- 2.5. **Taxes.** All prices are exclusive of applicable taxes. All taxes shall be payable by Customer, unless Customer presents Hart with a proper certificate of exemption from such tax. If Customer challenges the applicability of any such tax, Customer shall pay the tax and may thereafter seek a refund. In the event Hart is required to pay any tax at time of sale or thereafter, Customer shall promptly reimburse Hart therefore.

3. PAYMENT

- 3.1. **Products.** Except as otherwise provided in Hart's quotation, amounts due for Products shall be billed upon shipment and shall be paid in full within thirty (30) days after delivery.
- 3.2. **Annual Fee.** The Annual Fee for the initial License and Support Subscription is due upon execution of this Agreement and annually thereafter before expiration thereof. Annual Fees for subsequently ordered License and Support Subscriptions, if any, shall be due upon acceptance of order and unless specified on the applicable quotation, the corresponding Annual Fees for renewals thereof shall be due annually with the renewal of the initially-ordered License and Support Subscription (i.e. shall be pro-rated and become co-terminus). If Customer fails to timely pay an Annual Fee, all Software licenses and Software Support Services will automatically terminate.
- 3.3. **Other Services.** Amounts due for other Services shall be billed upon the earlier to occur of one or more of the following: first election in which the Professional Services are used; receipt of Services acceptance; not later than sixty (60) days after the date of Customer's first election in which any portion of the Hardware and/or Software is used, and shall be due within thirty (30) days of receipt of invoice.

- 3.4. **Payment Mechanics.** Customer will pay all amounts due under this Agreement in U.S. Dollars. All payments are to be made to Hart at its principal office in Austin, Texas, as set forth on the signature page or to such other location as may be designated by Hart in a notice to Customer. Hart reserves the right to require C.O.D. payment, a letter of credit, or other security for payment if it determines that such terms are required to assure payment. Customer shall promptly notify Hart in writing of any change to Customer's name, address, or billing information.
- 3.5. **Late Fees.** Hart may impose interest at the lower of: (1) one and one-half percent (1½%) per month, or (2) the highest rate of interest then permitted by applicable law for all past due balances, compounded monthly and rounded to the next highest whole month. Customer also agrees to pay or reimburse all fees and expenses reasonably incurred by Hart in collecting any amounts due under this Agreement, including, but not limited to, all attorneys' fees associated therewith. Hart shall have the right, in addition to any and all other rights and remedies available at law or in equity, to delay or cancel any deliveries, to reduce or cancel any or all quantity discounts extended to Customer, and/or to suspend the provision of Services if Customer is in default of payments or any other material term of this Agreement.
- 3.6. **Billing Disputes.** If any dispute exists between the parties concerning the amount due or due date of any payment, Customer shall promptly pay the undisputed portion. Such payment will not constitute a waiver by Customer or Hart of any of their respective legal rights and remedies against each other. Customer has no right of set-off.

4. HARDWARE SPECIFIC TERMS

- 4.1. **Delivery.** Hart will provide estimated shipment dates upon acceptance of Customer's signed quotation. Shipment dates on Hart quotations are approximate only and Hart will not be subject to liability for late or delayed shipment. In the event Customer is unable to receive the Hardware Products at the time of delivery Hart, at its sole option and convenience, may deliver such products to storage at any suitable location including Hart's facilities. All costs incurred by Hart for the transportation, storage, and insurance of such Hardware Products shall be borne by Customer.
- 4.2. **Hart Voting System Equipment Pick-Up.** If Customer has legacy Hart Voting System (HVS) equipment, Hart will pick up and salvage all HVS voting devices, computers, and peripherals at no cost to Customer. Customer may retain databases and reports stored on such equipment solely to comply with record retention policies. Customer may retain minimal necessary computers and copies of legacy software for access to records retention databases. Customer agrees to remove all HVS software from all retained computers at the close of the records retention period. Upon request, Customer will provide Hart with written certification that such software has been deleted.
- 4.3. **Acceptance.** Customer shall examine all Hardware Products promptly upon receipt thereof. Within ten (10) business days of such receipt, Customer shall notify Hart in writing of any manner in which Customer claims that the Hardware Products fail to conform to their applicable specification, or as to any claimed shortages, or shipments errors. If no written notification is received by Hart within such period, the Hardware Products delivered hereunder shall be deemed accepted by Customer ("**Hardware Acceptance**"). Hardware Product will be deemed conforming if it meets Hart's published specification for such Product, and any specifications identified on the applicable quotation. Upon Customer's Acceptance, any defects in material or workmanship shall be addressed pursuant to the warranty in Section 9 below.
- 4.4. **Installation.** A Hart representative may install the Hardware Products at the Customer's site on a mutually agreed upon date during Hart's normal working hours, within ten (10) business days of delivery, or as soon as is practicable for both parties. Billing will occur on the date the Hardware is shipped to the Customer's site, per Section 3.1 If additional labor and rigging or Customer-specified customization is required for installation due to Customer's special site requirements, Customer will pay those costs including costs to meet union or local law requirements.
- 4.5. **Title and Transportation.** Hardware Products are shipped Ex Works (Incoterms 2010) from Hart's designated shipping point. Title transfer and transfer of risk of loss or damage shall be deemed to occur upon Hart making such Hardware Products available to the carrier at Hart's designated shipping point. Hart reserves the right to select the method and routing of transportation and the right to make delivery in installments unless otherwise specified at the time of quotation acceptance by Hart but in no event will the carrier be deemed the agent of Hart. Notwithstanding the foregoing, if customer chooses a financing option offered by Hart, then title to hardware will pass to Customer according to the terms of the finance agreement.
- 4.6. **Rescheduling and Cancellation.** Except in the event of unreasonable delays beyond the quoted delivery dates or an uncured default of a material term of this Agreement by Hart, Customer shall not have the right to change, cancel, or reschedule an accepted quotation in whole or in part without the prior consent of Hart. In the event Customer requests a rescheduling of any Hardware Product and such request is accepted by Hart, Customer agrees to promptly pay Hart's standard reschedule charge. Hart may not cancel a quotation after it has accepted Customer's signed submission thereof. Customer may not cancel an order after submission to Hart of a signed quotation. Any cancellations following such times will be at the non-cancelling party's sole discretion and upon terms dictated by the non-cancelling party.

5. SOFTWARE SPECIFIC TERMS

- 5.1. **License**. Subject to the terms and conditions of this Agreement and for so long as Customer has a current License and Support Subscription in effect, Hart grants to Customer (i) a personal, nonexclusive, nontransferable, and limited license to use the Hart Proprietary Software (which includes Firmware, meaning the Hart Proprietary Software embedded in any Verity system device that allows execution of the software functions) and (ii) a personal, nonexclusive, nontransferable, and limited sublicense to use the Sublicensed Software, if applicable. With this right to use, Hart will provide Customer, and Customer will be permitted to use, only the run-time executable code and associated support files of the Software for Customer's internal data processing requirements as part of the Verity system. The Software may be used only at the Licensed Location specified as the jurisdiction on the signature page of this Agreement and only on the hardware or other computer systems authorized by Hart in writing. Customer's use of the Software will be limited to the number of licenses specified in the applicable quotation. Only Customer and its authorized employees, agents or contractors may use or access the Software. For applicable components, Voters are also authorized to interact with the Software, in a manner consistent with user instructions, for the sole purpose of producing a Cast Vote Record during the course of an election. To the extent Hart Proprietary Software contains embedded third party software, third party licenses may apply. More information concerning embedded third party software can be found in the application's "Help->About" and is available upon written request. Such embedded third party software is distinguished from "Sublicensed Software" which is stand-alone software not part of Hart Proprietary Software that may be included under this Agreement. See **Exhibit D** for a listing of Hart Proprietary Software and Sublicensed Software.
- 5.2. **Records and Audit**. Customer shall keep clear, complete and accurate books of account and records with respect to the usage of Software and access to the Software licensed hereunder, including without limitation with respect to access thereto. Licensee shall retain such books and records for a period of five (5) years from the date of cessation of any such usage, notwithstanding any expiration or termination of this Agreement. Customer agrees that during the term of this Agreement and such period, Hart, the licensors of any Sublicensed Software, and their representatives may periodically inspect, conduct, and/or direct an independent accounting firm to conduct an audit, at mutually agreed-upon times during normal business hours, of the computer site, computer systems, and appropriate records of Customer to verify Customer's compliance with the terms of the licenses and sublicenses granted to Customer. If any such examination discloses unauthorized usage, then Customer, in addition to paying such payment then due and without limiting Hart's remedies, shall pay the reasonable fees for the audit.
- 5.3. **Restrictions**
- 5.3.1. The Hart Hardware and Hart Proprietary Software are designed to be used only with each other and/or the agreed-upon Sublicensed Software (if any) and Third Party Hardware. To protect the integrity and security of the Verity system, Customer shall comply with the following practices and shall not deviate from them without the express written consent of Hart: (i) Customer shall use the Software and Hardware only in connection with the Verity system, and Customer may only use Hart branded or approved peripherals and consumables with the Verity system.; (ii) Customer shall not install or use other software on or with the Hardware or Software or network the Hardware or Software with any other hardware, software, equipment, or computer systems; and (iii) Customer shall not modify the Hardware or Software. If Customer does not comply with any provisions of this Section 5.3, then (i) the Limited Warranties under Section 9 and the licenses and sublicenses granted under Section 5.1 will automatically terminate; (ii) Hart may terminate its obligation to provide Software Support Services under Section 8; (iii) Hart will have no further installation obligations. Furthermore, if Customer uses the Software and Hardware in combination with other software and equipment (other software or equipment being those not provided by Hart or its designees), and the combination infringes Hart proprietary patent claims outside the scope of the software license granted to Customer under Section 5.1, Hart reserves its rights to enforce its patents with respect to those claims.
- 5.3.2. Customer shall not, under any circumstances, cause or permit the adaptation, conversion, reverse engineering, disassembly, or de-compilation of any Software. Customer shall not use any Software for application development, modification, or customization purposes, except through Hart.
- 5.3.3. Customer shall not assign, transfer, sublicense, time-share, or rent the Software or use it for facility management or as a service bureau serving others outside of the jurisdiction. This restriction does not preclude or restrict Customer from contracting for election services for other local governments located within Customer's jurisdictional boundaries. Customer shall not modify, copy, or duplicate the Software. All use of software and hardware on which the software resides shall take place and be for activities within Customer's jurisdictional boundaries, except for in cases of joint elections conducted cooperatively with neighboring jurisdictions. All copies of the Software, in whole or in part, must contain all of Hart's or the third-party licensor's titles, trademarks, copyright notices, and other restrictive and proprietary notices and legends (including government-restricted rights) as they appear on the copies of the Software provided to Customer. Customer shall notify Hart of the following: (i) the location of all Software and all copies thereof and (ii) any circumstances known to Customer regarding any unauthorized possession or use of the Software.
- 5.3.4. Customer shall not publish any results of benchmark tests run on any Software.
- 5.3.5. The Software is not developed or licensed for use in any nuclear, aviation, mass transit, or medical application or in any other inherently dangerous applications. Customer shall not use the Software in any inherently dangerous application and agrees that Hart and any third-party licensor will not be liable for any claims or damages arising from such use.

6. DOCUMENTATION

Hart will provide Customer with one (1) electronic copy of the standard user-level documentation and operator's manuals and where applicable, environmental specifications for the Product installed at the Customer's location before the first election for which the Product will be used, following installation.

7. PROPRIETARY RIGHTS

- 7.1. **Reservation of Rights.** Customer acknowledges and agrees that the design of the Products, and any and all related patents, copyrights, trademarks, service marks, trade names, documents, logos, software, microcode, firmware, information, ideas, concepts, know-how, data processing techniques, documentation, diagrams, schematics, equipment architecture, improvements, code, updates, trade secrets and material are the property of Hart and its licensors. Customer agrees that the sale of the Hardware and license of the Software does not, other than as expressly set forth herein, grant to or vest in Customer any right, title, or interest in such proprietary property. All patents, trademarks, copyrights, trade secrets, and other intellectual property rights, whether now owned or acquired by Hart with respect to the Products, are the sole and absolute property of Hart and its licensors. Customer shall not, under any circumstances, cause or permit the adaptation, conversion, reverse engineering, disassembly, or de-compilation of any Product(s), or copy, reproduce, modify, sell, license, or otherwise transfer any rights in any proprietary property of Hart. Further Customer shall not remove any trademark, copyright, or other proprietary or restrictive notices contained on any Hart user documentation, operator's manuals, and environmental specifications, and all copies will contain such notices as are on the original electronic media. Intellectual Properties. All ideas, concepts, know-how, data processing techniques, documentation, diagrams, schematics, firmware, equipment architecture, software, improvements, code, updates, and trade secrets developed by Hart personnel (alone or jointly with others, including Customer) in connection with Confidential Information, Verity system, and Hart Proprietary Software will be the exclusive property of Hart.
- 7.2. **Customer Suggestions and Recommendations.** Customer may propose, suggest, or recommend changes to the Products at any time. Such proposals, suggestions, or recommendations will become Hart's property and are hereby assigned to Hart. Hart may include any such proposals, suggestions, or recommendations, solely at Hart's option, in subsequent periodic Product updates, without restriction or obligation. Hart is under no obligation to change, alter, or otherwise revise the Products according to Customer's proposals, suggestions, or recommendations.
- 7.3. **License Back** If Customer possesses or comes to possess a licensable or sub-licensable interest in any issued patent with claims that read upon the Verity system, its method of operation, or any component thereof, Customer hereby grants and promises to grant a perpetual, irrevocable, royalty-free, paid-up license, with right to sublicense, of such interest to Hart permitting Hart to make, have made, use, and sell materials or services within the scope of the patent claims.

8. SOFTWARE SUPPORT SERVICES

- 8.1. **Description of Software Support Services.** Subject to the terms and conditions of this Agreement and for so long as Customer has the requisite number of License and Support Subscriptions in effect, Hart will provide Customer the Software Support Services described below. Software Support Services under this Section do not cover any of the exclusions from warranty and support coverage as described under Section 9. If Hart, in its discretion, provides Software Support Services in addition to the services described under this Section, Customer will pay Hart for such services on a time-and-materials basis at Hart's then-prevailing rates, plus expenses, and for replacements at Hart's list prices, unless otherwise agreed in writing by Hart and Customer.
- 8.1.1. **Software Support Services.** Software Support Services will consist of assisting the Customer in the use of software for purposes of election administration, including functions related to pre-election and post-election testing and general operation of the Verity system. Assistance is available via phone and email through the Hart Customer Support Center. See **Exhibit B** for Hart Customer Support contact information and hours.

Software Support Services may consist of periodic updates to Hart Proprietary Software, at Hart's discretion. Because not all errors or defects can or need to be corrected, Hart does not warrant that all errors or defects will be corrected. Software errors or defects must be reported in writing and be accompanied with sufficient detail to enable Hart staff to reproduce the error and provide a remedy or suitable corrective action. The exclusions from warranty coverage under Section 9.5 also are exclusions from Software Support Services under this Section. There may be consumable, shipping and on-site service charges for update releases of software and there may be feature charges for update or enhancement releases of software.

9. WARRANTY AND EXTENDED WARRANTY

- 9.1. **Certification.** Where applicable, Verity system components that require certification will meet the certification requirements in place on the effective date of the Master Agreement.
- 9.2. **Hart Hardware Limited Warranty.** Hart warrants that during the warranty period, the Hart Hardware purchased by Customer will be free from defects in materials and workmanship and will substantially conform to the performance specifications stated in the Verity Operator's Manuals for the Hart Hardware applicable at the time of the installation of the Hardware. The warranty

period for new Hart Hardware (other than Consumables) is one (1) year, beginning ten (10) days after the shipping date. The warranty period for used and/or refurbished hardware is ninety (90) days, beginning ten (10) days after the shipping date. Consumables are warranted only to be free from manufacturing defects for a period ninety (90) days, beginning ten (10) days after the shipping date. Hart will, at Hart's sole discretion, replace or repair any Hart Hardware that does not comply with this warranty, at no additional charge to Customer. To request warranty service, Customer must contact Hart in writing within the warranty period. Hart may elect to conduct any repairs at Customer's site, Hart's facility, or any other location specified by Hart. Any replacement Hart Hardware provided to Customer under this warranty may be new or reconditioned. Hart may use new and reconditioned parts in performing warranty repairs and building replacement products. If Hart repairs or replaces Hart Hardware, its warranty period is not extended and will terminate upon the end of the warranty period of the replaced or repaired Hart Hardware. Hart owns all replaced Hart Hardware and all parts removed from repaired products. Customer acknowledges and agrees that this warranty is contingent upon and subject to Customer's proper use of the Verity system and the Exclusions from Warranty and Software Support Services set forth in Section 9.5. This warranty does not cover any Hart Hardware that has had the original identification marks and/or numbers removed or altered in any manner. This warranty does not include any type of routine maintenance service or preventative maintenance service. This Hardware Limited Warranty may be extended after the initial period under separate Extended Hardware Warranty agreements, subject to the order process contemplated by Section 1. Extended warranties exclude consumable items, including all types of batteries, vDrives and paper ("Consumables"). Renewal of the annual License and Support Subscription does not, in itself, extend the Hardware Limited Warranty. The remedies set forth in this Section are the full extent of Customer's remedies and Hart's obligations regarding this warranty. If the Hart Hardware is required to be reconfigured, modified, or otherwise changed after its sale to and installation at the Customer's location due to the Customer's or a local, state, or federal government certification change(s) or due to any statutory changes or new requirements, Hart will determine the feasibility and cost of the required changes and advise the Customer of the total amount due for those Hart Hardware changes. Upon written approval to move forward with the changes and receipt from the Customer of the stated fees, Hart will complete the required changes to the Customer's Hart Hardware. THIS LIMITED WARRANTY DOES NOT APPLY TO ANY THIRD PARTY HARDWARE.

- 9.3. **Hart Proprietary Software Limited Warranty.** Hart warrants that beginning ten (10) days after the shipping of the Hart Proprietary Software and for so long as Customer has the requisite number of License and Support Subscriptions in effect, the Hart Proprietary Software will perform substantially according to the then-current functional specifications described in the applicable software Operators' Manuals accompanying such Hart Proprietary Software. To request warranty service, Customer must contact Hart in writing within the warranty period. Failure to conform to the warranty must be reported in writing and be accompanied with sufficient detail to enable Hart to reproduce the error and provide a remedy or suitable corrective action (a solution that will allow the software to function appropriately). Hart will make commercially reasonable efforts to remedy or provide a suitable workaround for defects, errors, or malfunctions covered by this warranty that have a significant adverse effect upon operation of the Hart Proprietary Software. Because not all errors or defects can or need to be corrected, Hart does not warrant that all errors or defects will be corrected. Customer acknowledges and agrees that this warranty is contingent upon and subject to Customer's proper use of the Verity system and the Exclusions from Warranty and Support Coverage set forth in Section 9.5. The remedies set forth in this Section 9.3 are the full extent of Customer's remedies and Hart's obligations regarding this warranty. THIS LIMITED WARRANTY DOES NOT APPLY TO ANY SUBLICENSED SOFTWARE.
- 9.4. **Professional Services Warranty.** Hart represents and warrants that any Professional Services shall be performed in a professional and workmanlike manner.
- 9.5. **Exclusions from Warranty and Software Support Services.** The warranties under this Section and Software Support under Section 8 do not cover defects, errors, or malfunctions that are caused by any external causes, including, but not limited to, any of the following: (a) Customer's failure to follow operational, support, or storage instructions as set forth in applicable documentation; (b) the use of incompatible media, supplies, parts, or components; (c) modification or alteration of the Verity system, or its components, by Customer or third parties not authorized by Hart; (d) use of equipment or software not supplied or authorized by Hart; (e) external factors (including, without limitation, power failure, surges or electrical damage, fire or water damage, air conditioning failure, humidity control failure, or corrosive atmosphere harmful to electronic circuitry); (f) failure to maintain proper site specifications and environmental conditions; (g) negligence, accidents, abuse, neglect, misuse, or tampering; (h) improper or abnormal use or use under abnormal conditions; (i) use in a manner not authorized by this Agreement or use inconsistent with Hart's specifications and instructions; (j) use of software on Equipment that is not in good operating condition; (k) acts of Customer, its agents, servants, employees, or any third party; (l) servicing or support not authorized by Hart; (m) Force Majeure; or (n) Consumables, unless expressly set forth in Section 9.2. In any case where Hart Proprietary Software interfaces with third party software, including but not limited to, the Customer's voter registration system, non-Hart election management system, early voting validation system, non-Hart election systems, absentee envelope management systems, or other like systems, Hart will not be responsible for proper operation of any Software that interfaces with the third party software should such third party software be updated, replaced, modified, or altered in any way. Hart will also not be responsible for the proper operation of any Software running on Customer's computer equipment, should Customer install a new computer operating system on said equipment without advising Hart of such changes and receiving Hart's written approval. Hart will not be responsible for the proper operation of any Software should it be configured or operated in any manner contrary than that described herein. Professional Services and associated costs may be required in those situations where the Customer requests Hart's review and approval of any system changes outside the original system specifications at the time of the original acceptance date of this Agreement. Hart reserves the right to charge for repairs on a time-and-materials basis at Hart's then-prevailing rates, plus expenses, and for replacements at Hart's list prices caused by these exclusions from warranty and support coverage.

9.6. **Third Party Hardware and Sublicensed Software Excluded.** HART MAKES NO REPRESENTATIONS OR WARRANTIES AS TO THIRD PARTY HARDWARE AND SUBLICENSED SOFTWARE, IF ANY, PROVIDED BY HART TO CUSTOMER, ALL OF WHICH IS SOLD, LICENSED, OR SUBLICENSED TO CUSTOMER "AS IS," OTHER THAN AS MAY BE PROVIDED IN ANY PASS-THROUGH WARRANTY DESCRIBED BELOW. HART HAS NO RESPONSIBILITY OR LIABILITY FOR THIRD PARTY HARDWARE AND SUBLICENSED SOFTWARE, IF ANY, PROVIDED BY HART'S DISTRIBUTORS OR OTHER THIRD PARTIES TO CUSTOMER. If Hart sells, licenses, or sublicenses any Third Party Hardware or Sublicensed Software to Customer, Hart will pass through to Customer, on a nonexclusive basis and without recourse to Hart, any third-party manufacturer's warranties covering the equipment or software, but only to the extent, if any, permitted by the third-party manufacturer. Customer agrees to look solely to the warranties and remedies, if any, provided by the manufacturer or third-party licensor. For a list of Third Party Hardware, see Exhibit A. For a list of Sublicensed Software, see Exhibit D or the applicable order. The disclaimers in this Section 9.6 are not intended to apply to embedded third party software integrated within the Hart Proprietary Software, contemplated by Section 5.1.

9.7. **Limited Remedies.** HART'S SOLE RESPONSIBILITY FOR MALFUNCTIONS AND DEFECTS IN PRODUCTS AND SERVICES IS LIMITED TO REPAIR AND REPLACEMENT AS SET FORTH IN, AND TO THE EXTENT SET FORTH IN, THIS WARRANTY TERMS SECTION.

10. PROFESSIONAL SERVICES

10.1. **Professional Services.** Subject to the terms and conditions of this Agreement, Hart will provide Customer (i) operational training and on-site support at the first election in which the Products are used, and (ii) the Professional Services described in each Hart-accepted, Customer-signed quotation. Professional Service days cannot be exchanged for Product fees, Annual Fees, or fees for other Services. If the Professional Services in an applicable quotation are not used prior to 60 days after the date of the Customer's first election in which any portion of the Product is used, Hart's Professional Services obligations shall expire and unused days will be billed to the Customer without recovery of amounts paid in advance for Professional Services.

11. REPRESENTATIONS AND WARRANTIES

11.1. **Due Organization.** Each party represents that it is duly organized, validly existing, and in good standing in the jurisdiction of its organization, and that it has the requisite power and authority to execute and deliver this Agreement and to carry out the transactions contemplated by this Agreement.

11.2. **Conflicting Agreements.** Each party represents and warrants that it has no outstanding agreement or obligation that is in conflict with any of the provisions of this Agreement, or that would preclude it from complying with the provisions hereof.

12. CUSTOMER RESPONSIBILITIES

12.1. **Independent Determination.** Customer acknowledges it has independently determined that the Products purchased under this Agreement meet its requirements

12.2. **Cooperation.** Customer agrees to cooperate with Hart and promptly perform Customer's responsibilities hereunder. Customer will (a) provide adequate working and storage space for use by Hart personnel near the applicable Hardware; (b) provide Hart full access to the Hardware and Software and sufficient computer time, subject to Customer's security rules; (c) follow Hart's procedures for placing hardware warranty or software support service requests and determining if warranty remedial service is required; (d) follow Hart's instructions for obtaining hardware and software support and warranty services; (e) provide a memory dump and additional data in machine-readable form if requested; (f) reproduce suspected errors or malfunctions in Software; (g) provide timely access to key Customer personnel and timely respond to Hart's questions; and (h) otherwise cooperate with Hart in its performance under this Agreement.

12.3. **Site Preparation.** Customer shall prepare and maintain the installation site in accordance with instructions provided by Hart. Customer is responsible for environmental requirements, electrical interconnections, and modifications to facilities for proper installation, in accordance with Hart's specifications. Any delays in preparation of the installation site will correspondingly extend Hart's delivery and installation deadlines.

12.4. **Site Maintenance; Proper Storage.** Customer shall maintain the appropriate operating environment, in accordance with Hart's specifications, for the Products and all communications equipment, telephone lines, electric lines, cabling, modems, air conditioning, and all other equipment and utilities necessary for the Products to operate properly. Customer shall properly store the Products when not in use.

12.5. **Use.** Customer is exclusively responsible for supervising, managing, and controlling its use of the Products, including, but not limited to, establishing operating procedures and audit controls, supervising its employees, making timely data backups, inputting data, ensuring the accuracy and security of data input and data output, monitoring the accuracy of information obtained, and managing the use of information and data obtained. Customer will ensure that its personnel are, at all times, educated and trained in the proper use and operation of the Products and that the Hardware and Software are used in accordance with

applicable manuals, instructions, and specifications. Customer shall comply with all applicable laws, rules, and regulations with respect to its use of the Products.

- 12.6. **Backups.** Customer is solely responsible for timely data backups, and Customer will maintain backup data necessary to replace critical Customer data in the event of loss or damage to data from any cause. Hart is not liable for data loss.

13. TERM AND TERMINATION

13.1. Term.

- 13.1.1. *Of Agreement.* Unless earlier terminated as set forth herein, the initial term of this Agreement is one (1) year.

- 13.1.2. *Of License and Support Subscription.* Unless earlier terminated as set forth herein, the initial term of the License and Support Subscriptions is one (1) year. Unless otherwise provided in the applicable quotation subsequently ordered License and Support Subscriptions shall be pro-rated so as to be co-terminus with the initially ordered License and Support Subscriptions.

- 13.1.3. *Of Hardware Warranty.* Unless earlier terminated as set forth herein, the initial term of new Hardware Warranties is one (1) year.

13.2. Renewals.

- 13.2.1. *Of Agreement.* This Agreement shall automatically renew for successive periods of one (1) year following the initial term unless one party notifies the other of its intent not to renew not less than ninety (90) days prior to the end of the then-current term.

- 13.2.2. *Of License and Support Subscriptions.* Except as otherwise provided in this Agreement, Customer must renew License and Support Subscriptions before their expiration by paying the Annual Fee invoiced by Hart, as provided in Section 2.2, before the anniversary date immediately following the date of invoice. Each renewal License and Support Subscriptions term will be a one (1) year, commencing on the expiration of the prior term and expiring on the immediately following anniversary date.

- 13.2.3. *Hardware Warranties.* Hardware warranties may be extended through a separate Extended Hardware Warranty, ordered in accordance with Section 1. Renewal of this Master Agreement and the License and Support Subscription do not, in themselves, extend hardware warranties.

13.3. Termination.

- 13.3.1. *By Hart.* This Agreement and/or all then-current License and Support Subscriptions and Professional Services orders shall automatically terminate or expire as set forth herein and may be terminated by Hart if Customer is in breach of a term hereof and fails to cure such breach within thirty (30) days after written notice of such breach has been given.

- 13.3.2. *By Customer.* Customer may terminate this Agreement, a Product order, or a License and Support Subscriptions and Professional Services orders issued hereunder if Hart is in breach of a term hereof or thereof, as applicable, and fails to cure such breach within thirty (30) days after written notice of such breach has been given.

- 13.4. **Effect of Expiration and Termination.** Any termination under Section 13.3.1 shall operate to terminate this Agreement and any then current License and Support Subscriptions and Professional Services orders. Any termination under Section 13.3.2 of a License and Support Subscription or Professional Services order shall operate only upon such subscription or order, and shall have no effect on this Agreement or other subscriptions or orders then in effect. Sections 3, 5.2-5.4, 7, 9.5-9.7, 12, 13.4, and 14-18 shall survive any termination or expiration of this Agreement or the applicable License and Support Subscription and/or Professional Services order. All other rights and obligations shall be of no further force or effect.

14. CONFIDENTIALITY

- 14.1. **Definition.** "Confidential Information" means any information related to Hart's business or the Verity system, including but not limited to technical data, trade secrets, know-how, research, product plans, products, services, customers, customer lists, markets, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, finances, or other business information. Confidential Information includes, without limitation, all Software, the Documentation and support materials, and the terms and conditions of this Agreement.

- 14.2. **Non-Use and Non-Disclosure.** Customer will keep in confidence and protect Confidential Information (electronic or hard copy) from disclosure to third parties and restrict its use to uses expressly permitted under this Agreement. Customer shall take all reasonable steps to ensure that the trade secrets and proprietary data contained in the Hardware and Software and the other Confidential Information are not disclosed, copied, duplicated, misappropriated, or used in any manner not expressly permitted by the terms of this Agreement. Customer shall keep the Software and all tapes, diskettes, CDs, and other physical embodiments of them,

and all copies thereof, at a secure location and limit access to those employees who must have access to enable Customer to use the Software. Customer acknowledges that unauthorized disclosure of Confidential Information may cause substantial economic loss to Hart or its suppliers and licensors.

- 14.3. **Return of Confidential Information.** Upon termination or expiration of this Agreement or, if earlier, upon termination of Customer's permitted access to or possession of Confidential Information, Customer shall return to Hart all copies of the Confidential Information in Customer's possession (including Confidential Information incorporated in software or writings, electronic and hard copies). Upon termination of Customer's license or sublicense of Software, Customer shall immediately discontinue all use of the Software and return to Hart or destroy at Hart's option, the Software, including Firmware (and all related Documentation (electronic and hard copy)) and all archival, backup, and other copies of Software, Firmware and Documentation, and provide certification to Hart of such return or destruction. Return or destruction may include hard drives and/or component flash drive devices.
- 14.4. **Customer Employees, Agents and Contractors.** Customer will inform its employees and other agents and contractors of their obligations under this Section 14 and shall be fully responsible for any breach thereof by such personnel.

15. INDEMNIFICATION

- 15.1. **Indemnity.** Hart, at its own expense, will defend Customer against any claim that the Hart Hardware or Hart Proprietary Software infringes an issued United States patent, registered United States copyright, or misappropriates trade secrets protected under United States law, and shall indemnify Customer against and pay any costs, damages and reasonable attorneys' fees attributable to such claim that are finally awarded against Customer, provided Customer (a) gives Hart prompt written notice of such claims; (b) permits Hart to control the defense and settlement of the claims; and (c) provides all reasonable assistance to Hart in defending or settling the claims.
- 15.2. **Remedies.** As to Hart Hardware or Hart Proprietary Software that is subject to a claim of infringement or misappropriation, Hart may (a) obtain the right of continued use of the Hart Hardware or Hart Proprietary Software for Customer or (b) replace or modify the Hart Hardware or Hart Proprietary Software to avoid the claim. If neither alternative is available on commercially reasonable terms, then, at the request of Hart, any applicable Software license and its charges will end, Customer will cease using the applicable Hart Hardware and Hart Proprietary Software, Customer will return to Hart all applicable Hart Hardware and return or destroy all copies of the applicable Hart Proprietary Software, and Customer will certify in writing to Hart that such return or destruction has been completed. Upon return or Hart's receipt of certification of destruction, Hart will give Customer a credit for the price paid to Hart for the returned or destroyed Hart Hardware and Hart Proprietary Software, less a reasonable offset for use and obsolescence.
- 15.3. **Exclusions.** Hart will not defend or indemnify Customer if any claim of infringement or misappropriation (a) is asserted by an affiliate of Customer; (b) results from Customer's design or alteration of any Hardware or Software; (c) results from use of any Hart Hardware or Hart Proprietary Software in combination with any non-Hart product, except to the extent, if any, that such use in combination is restricted to the Verity system designed by Hart; (d) relates to Sublicensed Software or Third Party Hardware alone; or (e) arises from Customer-specified customization work undertaken by Hart or its designees in response to changes in Hart Proprietary Software or Sublicensed Software that are made in response to Customer specifications.
- 15.4. **EXCLUSIVE REMEDIES.** THIS SECTION 15 STATES THE ENTIRE LIABILITY OF HART AND CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR INFRINGEMENT AND TRADE SECRET MISAPPROPRIATION.

16. DISCLAIMERS AND LIMITATIONS OF LIABILITY

- 16.1. **Disclaimer of Warranty.** EXCEPT FOR THE EXPRESS LIMITED WARRANTIES APPLICABLE TO THE PRODUCT(S) AND/OR SERVICES SET FORTH IN SECTION 9, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, (A) THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE UNDER THIS AGREEMENT, AND (B) HART DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, TITLE AND NONINFRINGEMENT FOR ALL HARDWARE, SOFTWARE, AND SERVICES. CUSTOMER IS SOLELY RESPONSIBLE FOR ASSURING AND MAINTAINING THE BACKUP OF ALL CUSTOMER DATA. UNDER NO CIRCUMSTANCES WILL HART BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR THE LOSS OF OR DAMAGE TO CUSTOMER DATA THE EXPRESS LIMITED WARRANTIES REFERENCED ABOVE EXTEND SOLELY TO CUSTOMER AND DO NOT INCLUDE ANY TYPE OF ROUTINE MAINTENANCE SERVICE OR PREVENTATIVE MAINTENANCE SERVICE. SOME STATES (OR JURISDICTIONS) DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, SO THE ABOVE LIMITATION MAY NOT APPLY.
- 16.2. **Limitations of Liability.** NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, HART WILL NOT BE LIABLE TO CUSTOMER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS) OR FOR LOST DATA SUSTAINED OR INCURRED IN CONNECTION WITH THE HARDWARE, SOFTWARE, SERVICES, OR THIS AGREEMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, REGARDLESS OF THE FORM OF ACTION AND WHETHER

OR NOT SUCH DAMAGES ARE FORESEEABLE. IN ADDITION, HART'S TOTAL LIABILITY TO CUSTOMER FOR DAMAGES ARISING OUT OF OR RELATING TO THE HARDWARE, SOFTWARE, SERVICES, AND THIS AGREEMENT WILL IN NO EVENT EXCEED THE TOTAL AMOUNT ACTUALLY PAID BY CUSTOMER TO HART UNDER THIS AGREEMENT UNDER THE ORDER FOR THE HARDWARE, SOFTWARE OR SERVICE GIVING RISE TO THE APPLICABLE CLAIM. HART IS NOT LIABLE FOR DAMAGES CAUSED IN ANY PART BY CUSTOMER'S NEGLIGENCE OR INTENTIONAL ACTS OR, EXCEPT AS EXPRESSLY SET FORTH HEREIN, FOR ANY CLAIM AGAINST CUSTOMER OR ANYONE ELSE BY ANY THIRD PARTY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF DAMAGES, SO THE ABOVE EXCLUSIONS AND/OR LIMITATIONS MAY NOT APPLY TO CUSTOMER. THE PARTIES AGREE THAT THE LIABILITY AND WARRANTY LIMITATIONS SET FORTH IN THIS AGREEMENT ARE A REASONABLE ALLOCATION OF RISK AND LIABILITY CONSIDERING THE RESPECTIVE BENEFITS OBTAINED HEREUNDER. THE FOREGOING LIMITATIONS SHALL APPLY NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY HEREIN.

- 16.3. **Third Party Products, Services and Referrals.** In addition to Third Party Products that may be ordered hereunder, Hart may direct Customer to third parties having products or services that may be of interest to Customer for use in conjunction with the Products or Services. Notwithstanding any Hart recommendation, referral, or introduction, Customer will independently investigate and test non-Hart products and services and will have sole responsibility for determining suitability for use of non-Hart products and services. Hart has no liability with respect to claims relating to or arising from use of non-Hart products and services, including, without limitation, claims arising from failure of non-Hart products to provide proper time and date functionality.

17. DISPUTE RESOLUTION

- 17.1. **Disputes and Demands.** The parties will attempt to resolve any claim or controversy related to or arising out of this Agreement, whether in contract or in tort ("**Dispute**"), on a confidential basis according to the following process, which either party may start by delivering to the other party a written notice describing the dispute and the amount involved ("**Demand**").
- 17.2. **Negotiation and Mediation.** After receipt of a Demand, authorized representatives of the parties will meet at a mutually agreed-upon time and place to try to resolve the Dispute by negotiation. If the Dispute remains unresolved after this meeting, either party may start mandatory nonbinding mediation under the commercial mediation rules of the American Arbitration Association ("**AAA**") or such other mediation process as is mutually acceptable to the parties.
- 17.3. **Injunctive Relief.** Notwithstanding the other provisions of this Section 17, if either party seeks injunctive relief, such relief may be sought in a court of competent jurisdiction without complying with the negotiation and mediation provisions of this Section.
- 17.4. **Time Limit.** Neither mediation under this section nor any legal action, regardless of its form, related to or arising out of this Agreement may be brought more than two (2) years after the cause of action first accrued.

18. GENERAL PROVISIONS

- 18.1. **Entire Agreement.** This Agreement and the Schedules, Attachments, and Exhibits hereto (including Hart-provided quotations signed by Customer and accepted by Hart) are the entire agreement between the parties with respect to the subject matter contemplated herein, and supersede all prior negotiations and oral agreements with respect thereto. Hart makes no representations or warranties with respect to this Agreement or its Products or Services that are not included herein. The use of preprinted Customer forms, such as purchase orders or acknowledgments, in connection with this Agreement is for convenience only and all preprinted terms and conditions stated thereon are void and of no effect. If any conflict exists between this Agreement and any terms and conditions on a Customer purchase order, acknowledgment, or other Customer preprinted form, the terms and conditions of this Agreement will govern and the conflicting terms and conditions in the preprinted form will be void and of no effect. This Agreement may not be amended or waived except in writing signed by an officer of the party to be bound thereby.
- 18.2. **Interpretation.** This Agreement will be construed according to its fair meaning and not for or against either party. Headings are for reference purposes only and are not to be used in construing the Agreement. All words and phrases in this Agreement are to be construed to include the singular or plural number and the masculine, feminine, or neuter gender as the context requires.
- 18.3. **GOVERNING LAW.** THIS AGREEMENT WILL BE GOVERNED BY THE LAWS OF THE STATE OF TEXAS, WITHOUT REGARD TO ITS CONFLICT OF LAW PROVISIONS, UNLESS CUSTOMER IS A GOVERNMENTAL SUBDIVISION OF ANOTHER STATE, IN WHICH CASE THE LAWS OF THE STATE IN WHICH CUSTOMER IS A GOVERNMENTAL SUBDIVISION WILL CONTROL.
- 18.4. **Severability.** Whenever possible, each provision of this Agreement will be interpreted to be effective and valid under applicable law; but if any provision is found to be invalid, illegal, or unenforceable, then such provision or portion thereof will be modified to the extent necessary to render it legal, valid, and enforceable and have the intent and economic effect as close as possible to the invalid, illegal, or unenforceable provision. If it is not possible to modify the provision to render it legal, valid, and enforceable, then the provision will be severed from the rest of the Agreement and ignored. The invalidity, illegality, or unenforceability of any

provision will not affect the validity, legality, or enforceability of any other provision of this Agreement, which will remain valid and binding.

- 18.5. **Force Majeure.** “**Force Majeure**” means a delay encountered by a party in the performance of its obligations under this Agreement that is caused by an event beyond the reasonable control of the party, but does not include any delays in the payment of monies due by either party. Without limiting the generality of the foregoing, “Force Majeure” will include, but is not restricted to, the following types of events: acts of God or public enemy; acts of governmental or regulatory authorities (other than, with respect to Customer’s performance, the Customer, and its governing entities); fires, floods, epidemics, or serious accidents; unusually severe weather conditions; failure of third parties to timely provide software, hardware, materials, or labor contemplated herein including by reason of strikes, lockouts, or other labor disputes. If any event constituting Force Majeure occurs, the affected party shall notify the other party in writing, disclosing the estimated length of the delay and the cause of the delay. If a Force Majeure or other such event occurs, the affected party will not be deemed to have violated its obligations under this Agreement, and time for performance of any obligations of that party will be extended by a period of time necessary to overcome the effects of the Force Majeure.
- 18.6. **Compliance with Laws.** Customer and Hart shall comply with all federal, state, and local laws in the performance of this Agreement, including those governing use of the Products. Products provided under this Agreement may be subject to U.S. and other government export control regulations. Customer shall not export or re-export any Products.
- 18.7. **Assignment.** Hart may assign this Agreement or its interests herein any including the right to receive payments, without Customer’s consent. Customer will be notified in writing if Hart makes an assignment of this Agreement. Customer shall not assign this Agreement or any licenses granted hereunder without the express written consent of Hart, such consent not to be unreasonably withheld.
- 18.8. **Independent Contractors.** The parties to the Agreement are independent contractors and the Agreement will not establish any relationship of partnership, joint venture, employment, franchise, or agency between the parties. Neither party will have the power to bind the other or incur obligations on the other’s behalf without the other’s prior written consent. Hart’s employees, agents, and subcontractors will not be entitled to any privileges or benefits of Customer employment. Customer’s employees, agents, and contractors will not be entitled to any privileges or benefits of Hart employment.
- 18.9. **Notices.** Any notice required or permitted to be given under this Agreement by one party to the other must be in writing and shall be given and deemed to have been given immediately if delivered in person to the address set forth on the signature page for the party to whom the notice is given, or on the fifth (5th) business day following mailing if placed in the United States Mail, postage prepaid, by registered or certified mail with return receipt requested, addressed to the party at the party’s address set forth on the signature page. Each party may change its address for notice by giving written notice of the change to the other party.
- 18.10. **Trademarks.** Verity Election Office™, Verity Voting™, Verity Scan™, Verity Touch™, Verity Controller™, Verity Access™, Verity vDrive™, Verity Touch Writer™, Verity Ballot™, Verity Layout™, Verity Build™, Verity Count™, Verity Relay™, Verity Key™, and Verity Central™, and such other Product names indicated as trademarked names of Hart are trademarks of Hart.
- 18.11. **Attorneys’ Fees.** In any court action at law or equity which is brought by one of the parties to enforce or interpret the provisions of this Agreement, the prevailing party will be entitled to reasonable attorneys’ fees, in addition to any other relief to which that party may be entitled.
- 18.12. **Equitable Relief.** The parties agree that a material breach of the confidentiality provisions of this Agreement or restrictions set forth herein would cause irreparable injury to Hart for which monetary damages alone would not be an adequate remedy, and therefore Hart shall be entitled to equitable relief in addition to any other remedies it may have hereunder or at law, without the requirement of posting bond or proving actual damages.
- 18.13. **Government Use.** The use, duplication, reproduction, release, modification, disclosure, or transfer of the Products, no matter how received by the United States Government, is restricted in accordance with the terms and conditions contained herein. All other use is prohibited. Further, the Products were developed at Hart’s private expense and are commercial in nature. By using or receiving the Products, the Government user agrees to the terms and conditions contained in this Agreement including the terms and conditions contained in this paragraph.

Exhibit A

Schedule A or Customer Signed Quote for Initial Order

Exhibit B

Hart Customer Support Contact Information and Hours

The following contact information is to be used by Customer for submitting Support requests to Hart InterCivic, Inc.:

Customer Support Center 1-866-275-4278 (1-866-ASK-HART)

Customer Support Center Fax 1-512-252-6925 or 1-800-831-1485

E-mail Address hartsupport@hartic.com

Hart InterCivic, Inc. Switchboard 1-800-223-HART (4278)

Hours of Operation 7AM-6PM Central Time, M-F

After Hours Leave Voicemail with contact information for return call

(The rest of this page has been intentionally left blank.)

Exhibit C

Definitions

“*Hart*” means Hart InterCivic, Inc., a Texas corporation.

“*Verity Access*™” means the audio tactile interface (ATI) controller created by Hart as an add-on component to a Verity Touch™ that facilitates the performance of voting activities by disabled voters, for example, by providing an audio ballot presentation and/or accepting inputs from adaptive switch mechanisms that facilitate interaction with disabled voters, as needed.

“*Verity Print*™” means the device created by Hart for purposes of on-demand ballot printing; this device creates a blank paper ballot from the poll worker’s selection of the voter’s ballot style or precinct on the Verity Print interface.

“*Verity Controller*™” is a polling place management console capable of interacting with one or more Verity Touch™ devices by transmitting and receiving signals that manage an election, e.g., by opening and closing the polls, providing or recording an audit trail of system events during an election, storing cast ballot data, and applying data security and integrity algorithms.

“*Verity Scan*™” means the Verity Scan™ device created by Hart, consisting of an in-person digital ballot imaging device. The single-feed scanner transports and scans both sides of a ballot simultaneously, and it is securely attached to a ballot box that provides for secure ballot storage and transport.

“*Verity Election Office*” means Hart InterCivic’s software platform that can accommodate a variety of election administration applications and is designed for interoperability with Verity Voting Hardware and Software.

“*Verity Touch*™” means the Verity Touch™ electronic voting device created by Hart. Verity Touch devices consist of hardware including an electronically configurable voting station that permits a voter to cast votes by direct interaction, which voting station in its present configuration created by Hart comprises an electronically configurable touchscreen liquid crystal display (LCD) panel for use in displaying ballot images, and options for tactile input buttons that facilitate voter options for selecting ballot choices and casting a ballot.

“*Verity Touch Writer*™” means the device created by Hart for ballot-marking functions. Touch Writer creates a paper marked ballot from the voter’s selections on the electronic interface or the Verity Access ATI controller.

“*Verity Voting*” means Hart InterCivic’s family of voting system components designed to conform to federal voting system standards.

(The rest of this page has been intentionally left blank.)

Exhibit D

HART PROPRIETARY SOFTWARE AND SUBLICENSED SOFTWARE

Hart Proprietary Software Licensed to Customer via annual subscription may include the following. Actual software and firmware licensed is indicated in the quote or response associated with this Agreement:

[illegible]

Licensed Location is the jurisdiction named on the signature page of this Agreement. Any future releases or updates to the software versions listed above will be documented in Hart Release Notes and Version Verification documents. Such releases and updates shall be considered Hart Proprietary Software licensed under this Agreement.

Software Sublicensed to Customer via annual subscription:

None

(The rest of this page has been intentionally left blank.)

Rechargeable Battery Best Practices

overview

This document outlines the best practices for the use of rechargeable system batteries in Verity devices. If you have any questions regarding these procedures, please contact the Hart Customer Support Center at 1-866-ASK HART.

battery specifications

Hart rechargeable batteries are lithium-ion Smart Batteries. Smart Batteries constantly communicate with the processor to determine voltage and discharge rate when active, and have built-in over voltage/over current protection. Hart system batteries are fully rechargeable (up to 500+ cycles) and include an integrated tester. Batteries are not shipped with a full charge. Batteries should be charged fully before their first use in an election. Battery life specifications are listed below:

- A fully charged battery will provide not less than 2 hours of backup power when installed in a device.
- A fully charged battery loses less than 10% of its charge over 90 days while connected to a device that is powered off, and 1% per day while the device is powered on and running on AC power.
- **IMPORTANT: Avoid allowing batteries to completely discharge to less than 10%; A completely depleted battery may become damaged to the point where it can no longer be recharged.**

IMPORTANT: Do not expose system batteries to temperatures above 60C (140F). Do not mishandle or disassemble battery modules. Failure to follow these instructions may present risk of explosion, fire, or high temperatures.

proper shut down procedures

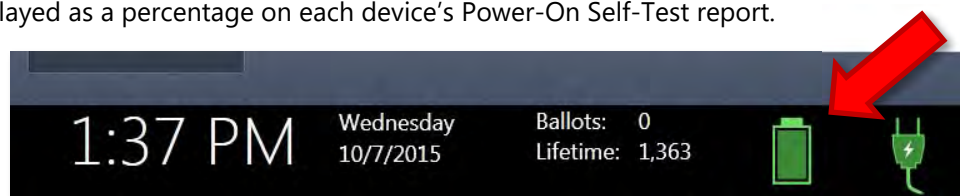
IMPORTANT: When powering off a Verity device, it is important to press the red power button on the back of the Verity device to power it down, and wait for the Verity device to be completely powered down and showing a black screen before unlocking the tablet and removing it from the cradle.

Removing the Verity tablet before the device has completely shut down will cause the Verity tablet to enter a 'hibernation' mode, which will deplete the system battery if the battery is left connected. If a battery becomes fully depleted, the battery may become permanently damaged, and unable to be recharged.

general use recommendations

When properly installed, and fully charged, a system battery will provide not less than 2 hours of backup power. Verity devices will automatically switch to available backup battery power if the device is disconnected from AC/wall power.

The relative charge of the system battery is displayed via a green battery icon on the Verity device screen, in the lower right corner (except during voting sessions). This icon shows only the approximate charge of the battery; the current charge level is displayed as a percentage on each device's Power-On Self-Test report.



If the device does not have access to backup battery power (the battery is disconnected, depleted, damaged, or not present), the screen will display a white battery icon with a red line through it:



charging recommendations

Use only Hart-approved battery charging stations; two sizes of charger are available: a single bay battery charger and a six-bay battery charger.

Batteries should be removed from storage, fully recharged and installed in the Verity voting devices no more than 30 days before an election. This will maximize the battery backup time available in the event of an AC power loss to the device. Charging time may vary depending on the current charge level of the battery, and may take up to 4 hours for a fully depleted battery.

battery storage

After an election, batteries should be removed from devices, tested, and stored in a cool, dry location. To maintain the working life of the battery and for improved battery safety, batteries should be stored with a charge of between 40%-60% (for instructions on testing the battery charge, see below).

IMPORTANT: Batteries should never be left in the device for long term storage (i.e. between elections).

installing, removing, and testing system batteries

IMPORTANT: Ensure that the Verity device is completely powered down before disconnecting the tablet and accessing the system battery.

To access the system battery (to test, remove, or replace):

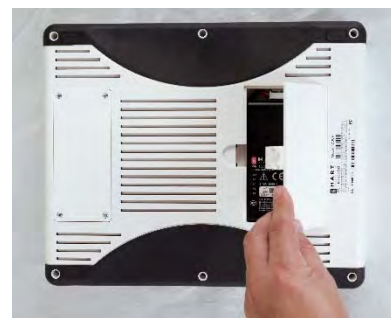
- 1 Press the red power button on the back of the device to turn it off. Wait for the Verity device to be completely powered down and showing a black screen before unlocking the tablet and removing it from the cradle



- 2 Unlock and remove the device tablet from its cradle.



- 3 On the back of the tablet, open the battery door.



- 4 To connect the battery, the tab on the connector coming from the battery must snap over the tab on the wire coming from the tablet. Failure to connect the battery properly can result in fire and damage to the device. To disconnect a battery, hold the white plastic connectors at both sides with your fingers, press on the tab, and pull gently.



- 5 Press the "TEST" button on the front left of the new battery to test the battery charge. Green lights should illuminate indicating the approximate charge. The charge level indicated is the *maximum* charge, in increments of 20% (e.g. if the lights indicate a charge level of 40, then the battery has between 21%-40% charge).



Equipment Handling Best Practices

overview

This document outlines the best practices for the storage and transport of Verity Voting system devices, as well as some key reminders to help you keep your Verity devices in good working condition.

Verity device storage

In static storage (i.e., when not being transported), Verity devices may be stacked horizontally. When stacked in this manner, ensure that the feet of each Verity device are resting in the indentations provided on the top of the case of the Verity device below it. **Do not stack Verity devices more than three (3) devices high.**

A note on Verity caddies: The capacity of Verity caddies will vary depending on the type and quantity of equipment being stored (Verity devices, booths, ballot boxes, printers, etc.). If transporting the devices in the caddy, follow the device transport best practices noted below.

Verity device transport

When transporting Verity devices, whether within the warehouse or storage area, inside a Verity Caddy, or when transporting by vehicle, always observe the following best practices:

- **Do not stack Verity devices during transport.**
- **Verity devices must only be moved with handles up (not stacked).**
- **Verity devices should be strapped down to minimize bouncing/movement.**

Verity device shipping

If shipping Verity devices by third-party transport (FedEx, UPS, USPS), including when shipping back to Hart for RMA, pack the device(s) securely in an outer cardboard box with adequate packing materials/overwrap to ensure the unit cannot shift within the box. An original box and foam packing materials from when the device was originally shipped to the jurisdiction can be reused for this purpose. Device tablets should be locked and latched within the device.

Other reminders

- **Never tilt a device up by the handle while cords are connected** – this can damage the cord where it connects to the device, or cause damage to the device itself.
- When disconnecting cords, never yank on the cord itself – grip the cord by the base where it connects to the device and pull firmly to remove.
- Verity power cords have a locking connector. When inserting the connector into a Verity device, it will make a small “click.” To disconnect the power cord, grasp the cord at the base of the black connector molding where it connects to the Verity device, and slide back the sleeve. This will unlock the connection so that the cord may be removed.



polling place operations

Estimated Time: 3 hours

Audience: Verity Scan and Touch Writer operators (poll workers)

Objectives: This course provides poll workers with an overview of the Verity system using Verity Scan and Touch Writer. After completing this course, the trainee will successfully set up and run the voting equipment, open polls, instruct and assist voters, and suspend/reopen or close the polls.

Teaching Method: Teaching method is presentation/demonstration. Following the presentation, trainees will break into groups for a hands-on simulated polling place exercise. During the presentation, questions should be held until the end of each section/module. A review session will follow the hands-on activities.

Documentation: *Verity Polling Place Field Guide: Scan & Touch Writer*

Structure: Introduction, 2 sections of 7 modules each, Polling Place exercise, Conclusion/Review

Prerequisites: None.

Assessment: Simulated polling place exercise.

Introduction: Getting Started with Verity *(Timing: 5 minutes)*

- **Course description and objectives**
- **System Components**
 - Verity Scan
 - Verity Touch Writer
 - Verity Access
 - vDrives

Section 1: Verity Scan *(Section timing: 1 hour)*

Section 1, Module 1: Setting up Verity Scan *(15 minutes)*

- **Setting up the ballot box**
- **Setting up the Verity Scan**

Note: The software startup for each unit may take several minutes, due to security and data integrity checks that the Verity software performs. This process is included in the design of the Verity Voting system to verify the authenticity of the software before allowing it to operate.

Section 1, Module 2: Verity Scan Orientation *(10 minutes)*

- **Screen orientation**
 - Print Zero Report screen
 - Ballots, Sheets and Lifetime Counts
 - AC and Battery power indicators (battery level on startup report)
- **Poll worker Button**
- **Thermal report printer operation**

Section 1, Module 3: Opening Polls on Verity Scan *(5 minutes)*

- **Printing the Zero Report**
 - Verifying polling place, time, and Zero Report
- **Opening the Polls**

Section 1, Module 4: Reopening Polls on Verity Scan *(5 minutes)*

- **Reopening Polls**

Section 1, Module 5: Voting with Verity Scan *(15 minutes)*

- **Ready for use screen**
- **Voting with Verity Scan**
- **Verity Scan help and features**
 - Language
 - Help
- **Troubleshooting**
- **Mismarked ballots**
- **Spoiling printed paper ballots**
- **Paper provisional ballots**
- **The emergency ballot bag/ballot slot**
- **Multi-sheet ballots**

Section 1, Module 6: Suspending Polls on Verity Scan *(5 minutes)*

- **Suspending polls**
- **Shutting down Verity Scan**
- **Packing up equipment**

Section 1, Module 7: Closing Polls on Verity Scan *(5 minutes)*

- **Closing polls**
- **Shutting down Verity Scan**
- **Packing up equipment**
- **Transferring vDrives and ballots**

Section 2: Verity Touch Writer (Section timing: 1 hour)

Section 2, Module 1: Setting up Verity Touch Writer (15 minutes)

- **Setting up the ballot printer**
- **Setting up the voting booth**
- **Setting up the Verity Touch Writer**

Note: The software startup for each unit may take several minutes, due to security and data integrity checks that the Verity software performs. This process is included in the design of the Verity Voting System to provide enhanced assurance that the system is working as designed and certified.

Section 2, Module 2: Verity Touch Writer Orientation (5 minutes)

- **Screen orientation**
 - Print Zero Report screen
 - Ballot and Lifetime Counts
 - AC and Battery power indicators (battery level on startup report)
- **Poll worker Button**
- **Verity Access**
 - Installing headphones and tactile switches
- **Thermal report printer operation**

Section 2, Module 3: Opening Polls on Verity Touch Writer (5 minutes)

- **Printing the Zero Report**
 - Verifying polling place, time, and Zero Report
- **Opening the Polls**

Section 2, Module 4: Reopening Polls on Touch Writer (5 minutes)

- **Reopening Polls**

Section 2, Module 5: Voting with Verity Touch Writer *(20 minutes)*

- **Ready for use screen**
- **Activating a ballot**
- **Marking ballots with Touch Writer**
 - Getting started
 - Selecting audio/screen options
 - Beginning voting
 - Making ballot choices
 - Reviewing choices
 - Printing ballots
- **Write-in voting**
- **Verity Touch Writer help buttons and features**
 - Language
 - Screen
 - Audio
 - Help
- **Spoiling a ballot (prior to printing)**
- **Printing a Summary report**

Section 2, Module 6: Suspending Polls on Touch Writer *(5 minutes)*

- **Suspending polls**
- **Shutting down Verity Touch Writer**
- **Packing up equipment**

Section 2, Module 7: Closing Polls on Touch Writer *(5 minutes)*

- **Closing polls**
- **Shutting down Verity Scan**
- **Packing up equipment**
- **Transferring vDrives and ballots**

Simulated Polling Place Exercise *(Timing: 45 minutes)*

In groups, rotate roles and run a simulated Polling Place. Use the *Polling Place Field Guide* as a reference.

- **Set up ballot box, voting booth, and printer**
- **Open Polls on Verity Scan and Verity Touch Writer**
- **Vote ballots:**
 - Activate a ballot on Touch Writer
 - Mark and print a ballot using Touch Writer
 - Mark and print a ballot with Touch Writer using Access/headphones
 - Scan and cast paper ballots on Verity Scan
- **Spoil a Verity Touch Writer ballot**
- **Print a Summary report on Touch Writer**
- **Change Verity Scan or Touch Writer thermal report printer paper**
- **Suspend and Reopen the polls OR Close the polls**

Conclusion: Polling Place Operations Review *(Timing: 15 minutes/variable)*

- **Verity Scan**
 - Setting up ballot box and Verity Scan
 - Opening/reopening polls
 - Scanning ballots
 - Suspending/closing polls
- **Verity Touch Writer**
 - Setting up printer, voting booth, and Verity Touch Writer
 - Opening/reopening polls
 - Marking and printing ballots
 - Suspending/closing polls
- **Q&A**

After Class Responsibilities

- **Predefine/prepare equipment for the next class.**
- **File sign-in sheet and evaluations in the envelope.**
- **Pick up trash and tidy up room.**
- **Set out materials for the next class.**
- **Make certain equipment is secure.**



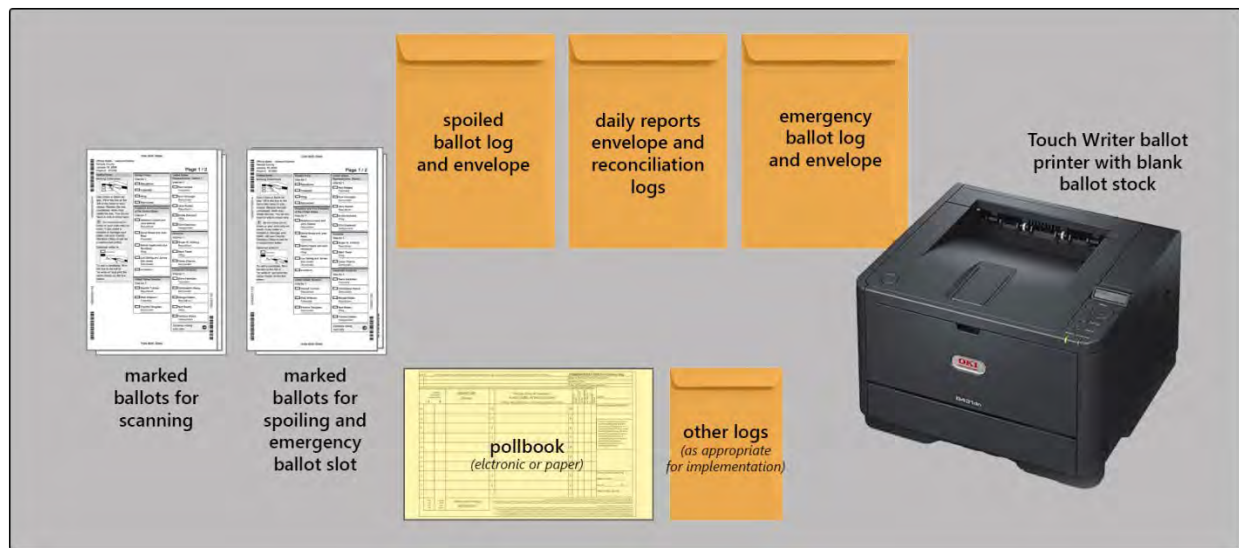
Polling Place Operations Equipment List

Hardware	Item	Quantity	Ratio	Notes
	Verity Scan		1: Lab station and 1 for presentation	
	Verity Touch Writer		1: Lab station and 1 for presentation	
	vDrives		2:Voting Device plus spares	Set up with Training Election
	Verity Key		1: Lab station and 1 for presentation	Set up for Training Election
	Verity Touch Writer Ballot Printer		1: Lab station and 1 for presentation	
	Verity Scan Ballot Box		1: Lab station and 1 for presentation	
	Verity Touch Writer Booth		1: Lab station and 1 for presentation	
	Verity Battery packs		1:Voting Device	
	Headphones/Jelly Switches		1: Lab station and 1 for presentation	
	Power strip(s)/Surge protectors/UPS devices		1:Lab station, 1: presentation station, and 1: projector/laptop	
	Extension Cords		1:lab station and 1 for presentation table	
	Presentation Laptop	1		
	Projector	1		

Documentation	Item	Quantity	Ratio	Notes
	Polling Place Operations Course Pack: Scan & Touch Writer	1		
	Polling Place Field Guide: Scan & Touch Writer		1:1	
	Marked Ballots		~50-100	
	Blank Ballot Stock		½ ream: Lab station	
	Voter Instruction flyers		Samples	
	Reconciliation Logs		2:Lab station	
	Pollbook (demonstration)	1		
	Spoiled Ballot Logs		2:Lab station	
	Ballot and Seal Certificates		2:Lab station	
	Daily Reports envelopes		1:Lab station	
	Emergency Ballot envelopes		1:Lab station	
	Other logs as appropriate to implementation		1:Lab station	EX: provisional ballot log and envelope, etc.
	Sign-in Sheet		1:class	
	Training Evaluation forms		1:1	
	Nondisclosure agreements		1:1	if applicable

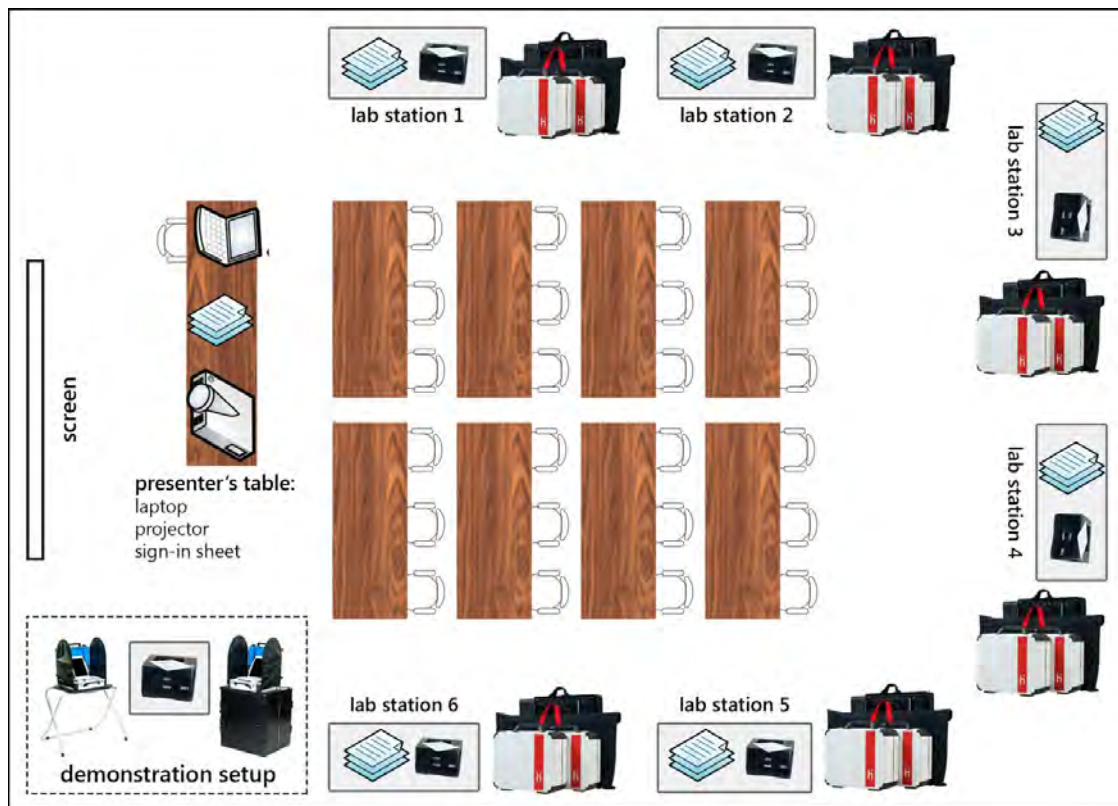
Miscellaneous	Item	Quantity	Ratio	Notes
	Isopropyl wipes	1 pack		
	Scanner test sheets	1		Emergency use
	Scanner calibration sheets (set)	1		Emergency use
	Device battery charger	1		
	Pens		1:1	
	Clipboard(s)	1		
	Presentation Screen	1		
	Device Security Seals	1	1:Lab station	Demonstration only
	Polling Place I.D. List	1		
	Device Passwords List	1		
	Thermal paper rolls		1:Device plus spares	
	Ballot Box/ Device Keys (sets)		1:Lab station/ 1 spare	

Lab Station Layout/Materials



NOTE: Lab station equipment shown above is for demonstration purposes only; actual equipment type and quantity will vary by implementation.

Suggested Classroom Layout



POLLING PLACE OPERATIONS COURSE

Trainers: 1

Jurisdiction Personnel: 1

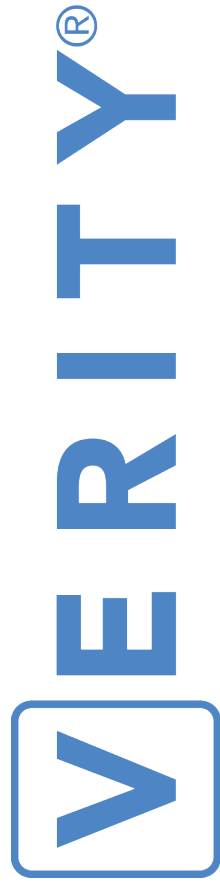
Trainees: Will vary, usually 10-12 (25) max

Time allotted per session: 2-3 hours

Hart Responsibilities for materials/equipment on site (if class taught by Hart representative):

- Projector (if not available on site)
- Laptop for presentation
- Training election USB drives, vDrives, Keys and ballots
- Sign-in Sheet
- Training Evaluation forms
- Nondisclosure agreements (if applicable)
- Polling Place Operations Course Pack

COUNTY/SITE IS RESPONSIBLE FOR ALL OTHER MATERIALS/EQUIPMENT



polling place operations





the polling place operations course

This course provides poll workers with an overview of the Verity system using Verity Scan and Touch Writer. After completing this course, the trainee will successfully set up and run the voting equipment, open polls, instruct and assist voters, and suspend/reopen or close the polls.

This course is designed to accompany the *Verity Polling Place Field Guide*.

Prerequisites: For elections staff, the *Verity Train the Trainer* course is recommended prior to conducting live training events with poll workers.